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# THE PERCEPTIONS OF ELITE MALE GYMNASTS OF THE EFFECTS OF PUNISHMENT ON SELF-EFFICACY AND ATHLETIC PERFORMANCE

Jason David Selk  
*University of Missouri-St. Louis*

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THE PERCEPTIONS OF ELITE MALE GYMNASTS OF THE EFFECTS OF PUNISHMENT  
ON SELF-EFFICACY AND ATHLETIC PERFORMANCE

BY

JASON SELK

B.S., University of Missouri-Columbia, 1993  
M.Ed., University of Missouri-St. Louis, 1997

DISSERTATION

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### **Abstract**

Existing literature suggests that coaches should use rewards rather than punishment for motivational purposes with athletes. The greatest argument against punishment lies in the evidence that the short-term positive effects on skill achievement are outweighed by the long-term negative effects on self-efficacy. Still, punishment is widely practiced within the coaching world; however, little research on coaching practices exists addressing the possibility that punishment could be utilized more effectively. As a beginning exploration of this topic, twelve elite male gymnasts were interviewed to determine what reinforcement their coaches used to motivate them. The results of the interviews seemed to reveal five conditions that could increase the effectiveness of punishment by minimizing the negative affect on self-efficacy of the athlete and the coach-athlete relationship. The first of these is perceived honesty from the coach about when the athlete is doing well and not doing well. Second, the athlete needs to know that the coach believes in his capabilities. Third, the athlete must trust in the coach and coaching plan. Fourth, the coach and athlete must have congruence in the assessment of the athlete's effort and lastly the coach must be consistent with follow through of pre-set rewards and punishments. The study seems to confirm the Social Learning Theory tenet that individuals are not only manipulated through reinforcement but rather they have the ability based on their perceptions to choose to act on reinforcement strategies.

## **CHAPTER 1**

### **INTRODUCTION**

Often what separates elite athletes from mediocre performers is the motivation to prepare for success. Preparing for success often involves training hard, practicing long hours, and studying the techniques and strategies of the sport. Relatively, there are only small differences in the physical attributes and skills of elite athletes, so those motivated to work harder are likely to outperform the others. People with high self-efficacy in a task are more likely to expend more effort, and persist longer, than those with low efficacy (Schunk, 1990). Self-efficacy is defined as the belief one has concerning their ability to perform in a certain manner to attain certain goals. The more athletes believe in their ability to accomplish high levels of performance, the more likely they will work hard, and the greater the chance of successful performance (Bandura, 1977; Bandura, 1997; Bandura 2001).

Research confirms that when coaches help their athletes develop optimally high levels of self-efficacy they will experience more success in training and competition. An athlete's self-efficacy is largely determined by how much success an athlete has had in the past (experience), what the athlete learns, based on watching others, is necessary for success (modeling), the encouragement and or discouragement he receives from outside sources (verbal persuasion), and his own physiological resources. Athletes who have successful experiences, positive modeling, encouragement from coaches and a belief in their own physiological ability experience elevated levels of self-efficacy and more success in competition. In athletics, motivation to train, self-efficacy, and performance success have a highly reciprocal relationship. Coaches often perceive that a large part of their role is utilizing external motivation to motivate athletes to train harder

and prepare for success more diligently. External motivation is a vehicle coaches can use to reach goals of increased self-efficacy, skill attainment and improved performance (Bandura 1997; Bandura 2001; Schunk, 1990).

Although this study will primarily look at the relationships among punishment, self-efficacy and performance it seemed essential to also examine the role positive reinforcement played. Within psychology, positive reinforcement and punishment have traditionally been discussed in the context of external motivation, specifically through operant conditioning. B.F Skinner built on the work of Edward L. Thorndike to popularize the principles of operant conditioning (i.e., the modification of behavior through the use of consequences), conducting research using rats. The rats were placed in an operant chamber which contained a lever. Pressing the lever would result in the dropping of a food pellet, acting as a reinforcer. When a reinforcer was present, the likelihood that the rat would press the lever increased. Positive reinforcement occurs when a rewarding stimulus increases the strength or probability of the behavior it follows. Punishment, in terms of operant conditioning, is an aversive stimulus that decreases the probability of a behavior. The principles associated with operant conditioning (Skinner, 1938) have been applied to many areas of psychology, and this study seeks to further study the principles of positive reinforcement and punishment to behavior in elite sport settings.

Extrinsic motivation, motivation where the satisfaction is a result of the externally based stimulus accompanying the behavior, and intrinsic motivation, motivation in which the level of satisfaction arises out of the behavior itself, are the two primary types of motivation. While coaches can influence intrinsic motivation over the long term, they predominantly manipulate extrinsic motivators to get maximum performance and effort from their athletes, especially in the

short term. For this reason, the focus of this research is the use of extrinsic motivation, or coaching reinforcement behaviors and how those reinforcement behaviors impact the athlete's self-efficacy and performance. Coaching reinforcement behaviors are divided into four categories: positive reinforcement, positive punishment, negative reinforcement and negative punishment (Skinner, 1974).

According to Skinner (1974) and his widely accepted theory of behaviorism, positive reinforcement increases the likelihood of a future behavior by adding a positive stimulus immediately following a highlighted behavior (for example, the coach rewards the player with additional playing time when he / she plays well) whereas negative reinforcement increases the frequency of future behaviors by removing an aversive stimulus following the emphasized behavior (coach eliminates running laps at the end of practice when the team practices well). Positive punishment decreases the likelihood of future behaviors by adding a negative stimulus following a specific behavior (coach sits the player on the bench when he / she plays poorly) and negative punishment decreases the frequency of future behaviors by removing a positive stimulus following the highlighted behavior (coach does not allow the player to take breaks during practices that aren't going well).

Due to the fact that it is difficult at times to assess the positive or negative meaning an individual attaches to reinforcement and punishment, many behavioral psychologists only recognize reward and punishment without much concern for the negative or positive polarity. For this reason this research will only explore the relationship that reward and punishment have on self-efficacy and performance (with the primary goal of better understanding the relationships among punishment, self-efficacy and performance). Reward is defined as any stimulus, situation,



or verbal statement that produces satisfaction for the athlete and punishment is defined a stimulus with negative valence or a stimulus capable of inflicting pain or discomfort (Chaplan, 1985; Michael, 1975, 2005).

Rewards generally come in the form of emotional or material rewards. Emotional rewards may include things like increased levels of personal power, freedom, prestige, or feelings of worth. For example, a coach may praise the athlete (emotional reward) when he does well, or the coach may provide the athlete with gifts or even cash bonuses (material rewards) when the athlete's performance is elevated. The athlete is motivated to improve performance in an attempt to experience emotional or material gain (Bandura, 1969; Smoll, 1993).

Punishment is associated with physical or emotional pain. Unwanted behaviors are punished in an attempt to eliminate the behavior. Punishment can produce fear, anxiety, or physical pain within the individual. Fear and anxiety are manifestations of physical or emotional pain (Smith, 1993) . It is the physical and/or emotional pain the individual is motivated to avoid. An athlete may experience fear or anxiety as a result of shame, guilt, loss of pride or prestige, or even financial loss in the form of fines (Bandura, 1969; Reynolds, 1994). For example, a coach may threaten to punish an athlete by forcing him to take a time out (i.e., not letting him compete in an upcoming competition) if he does not perform at a certain level in practice, or the coach may have the athlete run laps when the player's performance is poor. The athlete learns that when performance is low, he or she will experience punishment in the form of a time out (emotional pain) or running laps (physical pain).

Motivation has long been an interest of psychologists. Reynolds (1994) defined motivation as the need and desire base that promotes or energizes behaviors. Simply put, it is the “why” associated with behaviors. Generally speaking, an organism’s behavior is largely dependent on motivation. Motivation is what energizes the organism to act or behave. Physiological motivation and psychological motivation are the two motivational drives. Physiological motivation is represented by physical drives or needs. Drives for food, shelter, and water are the primary physiological needs. Physiological needs are characterized as those the body requires to survive. Psychological needs are the drives associated with thought. Thought representation of needs can also be seen as wants or desires (Heyman & Dweck, 1996). Psychological drives are the drives this study will further explore. The coach –athlete relationship is more focused on changing behaviors that influence human potential as opposed to the physiological needs that more directly emphasize survival of the organism.

In the athletic arena coaches have the ability to influence an athlete’s performance through the athlete’s psychological drive to experience emotional or material reward (positive reinforcement) while avoiding emotional or physical discomfort (punishment). The athlete has the ability to choose to attempt to excel at a particular task or even to participate in the first place. The key is choice. If the athlete experiences a choice, motivation, whether reward-based or punishment-based, can influence the athlete’s decision-making.

In contrast, if the athlete believes he/she is satisfying a physiological or psychological need, there is little or no room for external (coaching) influence. For example, a marathon runner who believes he/she needs to stop for water to avoid passing out is far less likely to respond to the coach’s urging to continue running than the marathoner who views stopping for

water as something that simply would be refreshing. The first runner is more likely to stop for water to meet the need for safety, whereas the second runner views the water as a preference associated with comfort. Obviously this example does not take into account other factors such as strategy, training cycles, athlete potential, or motivational possibilities; however, all other factors held constant, the deciding factor in the potential influence of external motivation is largely decided by athletes' *perceptions* of their behavior satisfying needs over wants (Bandura, 1977, 1997).

In athletics much research has looked into the effective use of reward as a motivational technique. Reward-based motivation is a more widely advocated and researched type of motivation and has been shown to have lasting effects on skill achievement and a positive effect on self-efficacy (Bandura, 1969, 1977, 1997). Additionally, reward-based motivation promotes the development of internal motivation in youth athletes. (Smith & Smoll, 1990). Researchers have generated much work indicating that reward-based motivation is an effective method of increasing skill achievement and developing self-efficacy; however, researchers and coaches alike are aware of the prevalent use of punishment as a motivational tactic although little research has explored its use (Gould & Weiss, 1987; Martin & Hyrcenko, 1983; Scanlan, 1982; Smith & Smoll, 1990; Vealey, 1986).

### **Statement of the Problem**

Little is known about punishment's role in the positive development of self-efficacy. The lack of information might prevent the educational community from taking full advantage of punishment as a resource. Punishment (in its current application) is widely considered to have negative side effects on the development of self-efficacy. Thus little research has been done into

the possibility that punishment in some applicable form can maintain positive effects on skill achievement while reducing or eliminating the negative side effects on development of self efficacy (Bandura, 1977; Harter, 1983; Smith & Smoll, 1990).

Reward and punishment-based motivation have proven effective for short-term behavior change. However, Smith in his work with youth athletes, stated that punishment typically falls short of positive reinforcement's ability to contribute to continued long-term behavior modification. This is explained by the negative motivational consequences associated with punishment. Punishment historically motivates with fear. Using fear as a motivator promotes anxiety and a lowered enjoyment of the sport experience and lowered ability to perform, in addition to potentially creating resentment and hostility towards the source (the coach) of the punishment (Smith, 1993).

Much research exists on the negative effect of using punishment to promote fear of failure as the motivational source (Avila & Torrubia, 2005, Malott, 2005; Miserandino, 1998; Perone, 2003). Additionally there are many studies alluding to the benefits of using reward as a means of increasing motivation while adding to the positive development of self efficacy (Amorose & Horn 2000; Hardin et al., 2006; Hollembeak & Amorose, 2005; Newton & Duda 1999). However, very little research has explored the possibility that punishment, applied under certain conditions, can contribute to skill achievement without negatively impacting self-efficacy development. Especially with athletes who are extremely accomplished and possess high levels of self-efficacy.

Coaches and educators are not sure if punishment should be used at all, and if so, to what extent. Coaches and educators are not sure if punishment should be used at all, or with some

athletes and not others, or in some situations and not others. It is also of great concern for coaches to know if it is possible to use punishment without having the negative side effects on self-efficacy. Research on this topic could be of great significance for coaches and educators alike. It could offer new insights into effective motivational learning and teaching dynamics. Additional research into punishment could create improved methods of external motivation, as well as increase the effectiveness of reward as a motivational resource.

### **Purpose of the Study**

This study concerns the relationship between punishment and performance. The prevalent finding of the research on punishment is a short-term increase in performance but a long-term detriment to self-efficacy. Most of the research, though, has been conducted with children and youth or with adult recreational athletes. Little research exists on the effect of punishment on elite athletes performing at the top levels of their sports. In practice, the coaches of elite athletes tend to use punishment to motivate athletes to practice longer and train harder, despite research findings. Perhaps they rely on a stronger self-efficacy in elite athletes or the latter's resilience to criticism.

The purpose of this study is to explore the perceptions that elite male gymnasts have concerning the effects of punishment being used by their coaches, and specifically how they perceive that punishment to affect their self-efficacy and their competitive performance. Although the primary emphasis of the study will emphasize punishment, the perceptions of the elite male gymnast concerning the effects of rewards being used by their coaches will also be examined to better understand the spectrum of reinforcement behaviors being utilized by coaches and the perceptions of athletes on that spectrum of reinforcement.

The lack of research indicates a void in the knowledge of coaches about punishment, the advantages, disadvantages, or the impact it has on the development of self-efficacy and performance. This research will explore the perceptions of athletes concerning the efficacy of rewards and punishments as a motivational resource within the sport domain. Athletes will provide information to contribute to the field of knowledge of reward- and punishment-based motivation and the effects on performance and the development of the elite athlete's self efficacy. Elite athletes in this study are defined as athletes who are current or former USA Gymnastics National Team members.

More specifically this study will attempt to answer the following research questions:

1. To what degree do elite athletes believe they experience punishment-based motivation from their coaches in training?
2. How do elite athletes perceive punishment-based motivation affects their self-efficacy?
3. How do elite athletes perceive punishment-based motivation affects their performance?
4. Do athletes have ideas concerning a more effective use of punishment in terms of increasing performance without decreasing self-efficacy?
5. To what degree do elite athletes believe they experience reward-based motivation from their coaches in training?
6. How do elite athletes perceive reward-based motivation affects their self-efficacy?

7. How do elite athletes perceive reward-based motivation affects their performance?

## **Theoretical Framework**

### ***Reinforcement and Punishment***

Due to the fact that this study's emphasis is on perceptions of punishment (a behavioral concept) the theoretical framework is behavioral in nature. For years behavioral researchers have studied the effects of reinforcement on learning. In 1911 Edward Thorndike developed the law of effect from his work with cats in which Thorndike realized that he could increase the likelihood of behaviors by following certain behaviors with satisfying consequences while decreasing the likelihood of certain behaviors by following those behaviors with discomfort as a consequence (Thorndike, 1911). In John Watson's 1913 seminal article "Psychology as the Behaviorist Views It", Watson argued that the primary goal of behaviorism was "prediction and control of behavior" and that the behaviorist sees "no dividing line between man and brute" (Watson, 1913).

B. F. Skinner (1938) re-shaped learning with his theory on operant conditioning where the power of reinforcement was brought to light. Skinner contended that all behavior was dictated by reinforcement. Skinner viewed behavior as a response to reinforcement rather than a choice based on perceptions. Skinner identified the terms of reinforcement and punishment. Whereas all reinforcement serves to strengthen behavior (positive reinforcement strengthens behavior through the application of some event while negative reinforcement strengthens behavior through the removal or avoidance of an event), punishment weakens behavior (positive

punishment weakens behavior through the application of an aversive consequence and negative punishment weakens behavior by removing a desirable consequence).

Albert Bandura's Social Cognitive Theory stated that individuals have and use the ability to control how they respond to behavioral influence (1977). Bandura termed the choice individuals have in how they respond to behavioral influences human agency. The agentic principle goes against traditional behaviorist views that state individuals are merely responding without choice to the environmental and behavioral forces acting on them. Essentially what Bandura's research suggests is the greatest motivational influence is determined by the perception of the external motivational forces rather than the motivational forces themselves. With this in mind it is imperative to identify what motivational forces are typically perceived as reward and punishment and the effect those perceptions have on subsequent achievement levels and self-efficacy (Bandura, 1977).

### *Self-Efficacy*

It is difficult to define self-efficacy largely because of the common misuse of terms and overlap of meaning of such terms as self-esteem, self-confidence, sport confidence and perceived confidence. Coopersmith's (1967) definition of self-esteem placed relevance on the physical domain. "Self-esteem is the evaluation which the individual makes and customarily maintains with regard to himself: It expresses an attitude of approval or disapproval and indicates the extent to which an individual believes himself to be capable, significant, successful and worthy. In short, self-esteem is a personal judgment of worthiness that is expressed in the attitudes the individual conveys to others by verbal reports and other expressive behavior" (p.5).



This proves relevant because it places emphasis on the individual's perceptions of worthiness. These perceptions of worth are then illustrated through verbal or nonverbal communication. Tutko and Tosi (1976) defined confidence as believing in one's abilities, while others have gone on to define it as a "state of assurance" (Zinsser, Bunker, & Williams, 2001). Vealey (1986) defined sport confidence as "the belief or degree of certainty individuals possess about their ability to be successful in sport" (p. 222). Harter's (1980) definition of perceived competence states that individuals have the belief that they know what to do and have the ability to be successful.

Although there is much overlap in meaning of terms concerning perceptions of the self, for the purposes of this study Bandura's definition of the term self-efficacy will be used. Bandura defined the term self-efficacy as an individual's belief that he or she has the necessary skills to produce a desired outcome (1977). Bandura stated that a person's self-efficacy greatly affects the level of effort a person puts forth as well as the level of success he or she will achieve (1997).

### **Significance of the Study**

Punishment is common in the motivational landscape. Individuals are taught at an early age that if the rules of society are broken there will be negative consequences. This societal philosophy has proliferated into many of the domain specific arenas where motivation plays an important role. Sport is one such venue where many coaches have learned the effectiveness of punishment without ever receiving information into best practices of its use.

This study is significant for two main reasons: First it will look at athlete perceptions of punishment as the guiding data. Research with youth athletes (identified through the use of the Coaching Behavior Assessment System) shows that incongruence exists between perceptions of

coaches and athletes in terms of coaching behaviors. Smith and Smoll (1993) stated that “It thus appears that coaches have a limited awareness of how frequently they engage in particular forms of behavior, and that athletes are more accurate perceivers of actual coach behaviors” (p.39).

The second reason this study is significant is that punishment (rather than reward) will be the explored topic. As previously stated, the bulk of the reinforcement research in athletics has focused primarily of the use of positive reinforcement, however this study will specifically focus on understanding how athletes perceive punishment. As an indication of the tendency to focus on positive reinforcement over punishment, the highly respected researcher Ron Smith identifies positive reinforcement and punishment as the two basic approaches to influencing behavior (Smith, 1993). However Smith’s 1993 research chapter includes one sub-heading (titled The Negative Side Effects of Punishment) focusing on punishment while eight sub-headings (titled Positive Reinforcement: Getting Good Things to Happen, Choosing Effective Reinforcers, Selecting and Reinforcing Target Behaviors, Shaping, An Example of a Successful Positive Reinforcement Program, Schedules and Timing of Reinforcers, Reinforcing Effort and other Desirable Behaviors, Reinforcement and Intrinsic Motivation) examine positive reinforcement.

Research suggests that punishment can be an effective method of creating behavior change (Bandura, 1969, 1977, 1997; Thorndike, 1911; Skinner 1938). For this reason many coaches use punishment as a motivational resource lacking the support of research to better help understand best practices for the use of punishment.. Punishment is often associated with a decrease in self-efficacy and an increase in defensiveness (Bandura, 1977). Coaches might lack knowledge of how to use punishment to avoid negative impact on self-efficacy. Bandura argues

that, as long as existing routines serve adequately (i.e. do not bring on negative consequences), there is little incentive to consider alternatives..

For example, many coaches do not realize that the positive gains punishment has on an athlete's motivation to change behavior (perform a skill differently) can be outweighed by the negative effect on the athlete's self efficacy. It is often observed that punishment can be effective in the short-run. Although the athlete may respond initially to the punishment, over time the likelihood increases that the negative effect on self efficacy will begin to stall positive behavior change. When an athlete's self efficacy is low he/she may experience a lack of motivation (Bandura 1969, 1977, 1997).

The research literature on coaching has placed great emphasis on reward based motivation, but it is well known that many coaches, including successful coaches of successful athletes, use punishment. It is important to know if there are circumstances under which punishment can be used without a negative effect on self efficacy or skill achievement so that those circumstances can be stressed to coaches; or, if there are no circumstances under which punishment can be used without negatively effecting athletes, coaches could be continuously reminded to avoid it.

Reinforcement, whether reward- or punishment-based, acts as an antecedent influence on behavior. The anticipation of reinforcement motivates people to engage in a certain behavior. One must be able to anticipate the consequence of a certain behavior in order for it to have an effect on his/her actions. Further, negative consequences are only effective for regulating behaviors that have already been learned (Bandura, 1977).

One must feel that he/she can successfully execute the behavior necessary to bring about positive outcomes and avoid negative outcomes. Self-efficacy is feeling capable that one can perform the action necessary to produce the desired/expected outcome; therefore, in order to preserve an athlete's self-efficacy, he/she must have knowledge that a behavior will result in a certain outcome. The strength of one's conviction that he or she can successfully execute a behavior required to produce an outcome will determine whether he or she will even try to cope with a difficult situation. (Bandura, 1977, 1997)

This study will identify a working knowledge of punishment and its impact on self-efficacy and performance. Best practices for using punishment to enhance current motivational practices will be identified, if they exist. Currently a void exists in the current research on the important relationship between punishment, self-efficacy, and performance.

### **Summary**

In sport the pressure to be successful is great and many coaches define success with winning. The intent of this research is not to suggest that winning is how success should be defined in sport, nor is it the researcher's goal to encourage coaches to use punishment more often with athletes. This study openly accepts the fact that coaches are using punishment with their athletes in the hopes of achieving greater levels of success and the intent of this research is to better equip coaches with the knowledge of how athletes perceive the punishment and to more effectively use punishment as a reinforcement resource.

The purpose of this study is to explore the perceptions that elite male gymnasts have concerning the effects of punishment being used by their coaches, and specifically how they perceive that punishment to affect their self-efficacy and their competitive performance. With the

end goal being that coaches further understand what works and what doesn't work with their athletes in terms effective motivation.

The theoretical framework supporting this study is largely based on behavioral research and more specifically Albert Bandura's Social Cognitive Theory in which Bandura states that humans are not merely being manipulated by positive and negative reinforcement. Rather individuals have the ability to choose through the use of perception what is motivational or not. Within Bandura's theory is the concept of self-efficacy where self-efficacy is defined as the belief one has concerning their ability to perform in a certain manner to attain certain goals.

Self-efficacy is correlated with the ability to train hard and perform well, while an inverse relationship exists between punishment and self-efficacy. The research at hand could be viewed as a win-win for coaches and athletes. If coaches could better learn to utilize punishment in a manner that didn't contribute to the negative side effects on the athlete's self-efficacy but maintained the positive tenets of behavioral influence, coaches would be more likely to have athletes training hard and performing well and the athlete's self-efficacy and ability to perform could be enhanced as well.

The significance of this study is two-fold: First punishment will be the primary concern rather than the focus being on reward. Although there will be a fair share of research on rewards reviewed and explored in research and interview questions, the main goal of doing so will be to better understand punishment. Secondly the research will explore what elite athletes perceive as effective rather than what coaches or educators believe about the effectiveness of punishment. This is unique in that much of the previous research has focused on youth athlete's perceptions

of coaching behaviors and or the perceptions of coaches or educators themselves about reinforcement behaviors.

## **CHAPTER 2**

### **REVIEW OF LITERATURE**

The following literature review is a comprehensive summary of the existing literature on the impact punishment and reward-based motivation have on the self-efficacy and athletic performance. A comprehensive review of the literature was conducted for articles in peer-reviewed journals and books pertaining to the topics of self-efficacy and self-confidence, motivation, reinforcement, punishment, and the relationships between these constructs.

#### **Theoretical Constructs**

The major theoretical constructs associated with this research are reinforcement, self-efficacy and the relationship that exists between reinforcement, self-efficacy and performance. Due to the theoretical grounding of this research in Bandura's Social Cognitive Theory the major constructs of reinforcement within Social Cognitive Theory will be examined first.

#### **Social Cognitive Theory**

Five major tenets of Bandura's social learning Theory are reviewed here; Human agency, observing and modeling, consequent determinants of behavior and expecting, building self-efficacy, and reinforcement.

#### *Human Agency*

Bandura's (1977) concept of human agency refers to each individual's unique ability to perceive an external stimulus. He goes on to identify the four core features of human agency as: intentionality, forethought, self-reactiveness, and self-reflectiveness. Intentionality is defined as an individual's ability to choose a specific course of action regardless of influence or expectation. Intentionality refers to the intention of the individual to respond in any particular

manner. There are times when the intended actions result in undesirable outcomes. Intentionality does not guarantee results or outcome. For example, a coach may choose to motivate through yelling, consequently hoping to “light a fire” in the athlete; however, the athlete may not respond to the punishment and may actually become less motivated than before the coach's reinforcement.

Forethought allows an individual to anticipate outcomes and develop action plans necessary in achieving certain outcomes. Behavior is guided and motivated through forethought. Forethoughts are also linked to the consequences of achieving or not achieving the forethought course of action. In doing so the future manifests itself in the present by motivation and directing individuals' behavior. An athlete may drag himself out of bed every morning before dawn so he can get the necessary training needed to accomplish his future goals for the sport. It is the forethought of future success that can drive athletes through days, weeks, months and even years of rigorous training.

Self-reactiveness is the individual's ability to assess productivity of current behavior and re-direct if necessary. Redirection of behavior may come in the form of changed intent and or actions plans or motivational intensity related to current behavior. Self reactiveness manifests itself in internal goal setting processes. Individuals plan for certain events and self-reactiveness helps regulate and motivate accomplishment. Essentially individuals will plan for outcomes and engage in actions that produce feelings of self worth and avoid behaviors that produce self-dissatisfaction. Bandura (2001) stated, in doing so “it is not uncommon for individuals to invest their self-worth so strongly in certain convictions that they will submit to harsh and punitive treatment rather than cede to what they regard as unjust or immoral” (p.9).



Self-reflectiveness is the fourth and last core feature of human agency. According to Bandura (2001), “people judge the correctness of their predictive and operative thinking against the outcomes of their actions, the effects other people’s actions produce, what others believe, deductions from established knowledge and what necessarily follows from it. Among the mechanisms of personal agency, none is more central or pervasive than people’s beliefs in their capability to exercise some measure of control over their own functioning” (p.10). Self-efficacy therefore is the single most important determinant in an individuals’ motivation to try and ability to accomplish tasks at hand (Bandura, 1977; Holden1991; Holden, Moncher, Schninke, & Barker 1990; Multon, Brown & Lent, 1991; Stajkovic & Luthans 1998).

Bandura (2001) contended “efficacy beliefs play a central role in the self-regulation of motivation through goal challenges and outcome expectations. It is partly on the basis of efficacy beliefs that people choose what challenges to undertake, how much effort to expend in the endeavor, how long to persevere in the face of obstacles and failures, and whether failure are motivating or demoralizing. The likelihood that people will act on the outcomes they expect prospective performances to produce depends on their beliefs about whether or not they can produce those performances” (p10).

### *Observation and Modeling*

According to Bandura (1977), by observing and modeling the behavior of others, humans are able to develop and refine their own ways of thinking and behaving. The consequent determinants of behavior, or subsequent effects that work to alter future actions, allow us to understand the factors that affect human thought and action and allow us to see how positive reinforcement and punishment affect our behavior. Reinforcement processes provide an

understanding of how human behavior may be regulated. Knowledge of all of these processes will allow us to better understand social learning and provide us with means to function more effectively within our society. Bandura (1977) emphasizes the exploration of the effects of observation/modeling, consequent determinants, and reinforcement on behavior.

The effects of observation and modeling on behavior are integral aspects of Bandura's Social Cognitive Theory. Observation/modeling is best understood through exploration of its functions and the processes that govern it. Most human behavior is adopted through modeling. When humans observe the actions and behaviors of others, they develop new patterns for their own actions (16). By observing the actions of others, modeling those behaviors, and integrating them with one's own prior knowledge, one may develop innovative ways of thinking and acting (Bandura, 1977).

Observation/modeling is governed by four processes: attentional, retentional, motor reproduction, and motivational processes. Attentional processes determine what is observed based on certain factors. For example, observers are inclined to attend to those people with whom they regularly associate such as coaches, teachers, and parents. Another factor that affects what behaviors are attended to by the observer is the complexity of the behavior. If information is overly simple or overly complex, the observer is less likely to attempt to process it. People do not engage in activities that differ much from what they have already experienced. Relatively easy tasks do not arouse much interest; moderate tasks maintain high effort and produce satisfaction upon achievement; difficult tasks that are beyond one's reach are discouraging. Another aspect that affects attentional processes is the characteristics of the model. High status individuals or those individuals with similar attributes to the observer are more likely to be

attended to than those of low status or whose abilities and characteristics are far different from the observer. People will attempt to model behaviors that they think they could match with some effort (Bandura, 1977).

Bandura (1977) stated, retentional processes are also important for governing observation/modeling. While modeling is the most effective cue to impact behavior, people must remember what they have observed in order to be influenced by it. Better retention of observed behavior is obtained by coding modeled activities into symbols. These symbols are represented in the memory in two main systems, imaginal and verbal. Rehearsal also serves as an important aid for retention. When individuals visualize themselves performing the appropriate behavior through mental rehearsal, proficiency and retention are increased. Motor reproduction, converting the stored symbols into actions, also works to govern observation/modeling. Skills and behaviors are not perfected through observation alone. People must first gain an approximation of the skill through observation and then gradually refine it through action.

Lastly, observation/modeling is governed by motivational processes. Although people do not repeat everything they learn, they are likely to adopt a behavior if they believe it may result in either a positive outcome or a forestalled negative consequence. For this reason, observational learning can be achieved more effectively if observers are informed in advance about the benefits of adopting the given behavior. However, as long as one's existing behaviors are sufficient, little incentives exist to change (Bandura, 1977).

#### *Consequent Determinants of Behavior and Expecting*

Bandura posits the importance of the consequent determinants of behavior. Bandura includes within the consequent determinant aspect of his theory an exploration of its three

functions and an explanation of expectancy learning. Consequences are only effective for regulating behaviors that have already been observed and learned, yet they serve important functions (1977). These include imparting information, motivating, and strengthening response. The information imparted by consequences allows people to develop hypotheses based on the effects of actions and gauge which responses are appropriate in the future. They also serve a motivating function because future consequences can be current motivators of behavior. As long as a person is able to anticipate the consequences of his behavior, his automatic responses are strengthened by increasing the likelihood of behavior that is reinforced and decreasing the likelihood of behavior that is punished. Consequences, however, can only increase the likelihood that a certain behavior will occur, not increase the strength of the behavior itself.

Bandura (1977) also discusses expectancy learning within his exploration of consequent determinants of behavior. Within the discussion of expectancy learning, the topics of vicarious learning, distress within the system, defensiveness, eliminating defensiveness, and building self-efficacy are included. Consequences extensively regulate behavior antecedently by creating expectations of future rewards or punishments. Bandura states that “vast amounts of behavior can be maintained with only infrequent immediate reinforcement” because the information imparted is processed over long periods of time. Stimuli become predictive of outcomes by correlating with response consequences. People learn to see predictive stimuli and summon up appropriate emotional reactions.

Information about predictive stimuli can also be derived by vicarious learning through observing the actions and consequences of others. When observing the experiences and resulting emotional states of others, however, a person will generally only learn when observing moderate

arousal levels. If witnessing too much pain, an observer may divert his attention to avoid it, and if witnessing too little arousal, the situation will have no effect on the observer. An example of people anticipating future emotional states based on current predictive stimuli is the effect of fear. When facing a seemingly threatening situation, fear has the same effects on a person whether there was only a threat of pain or if pain was actually experienced (Bandura, 1977).

While this expectancy learning has much adaptive value, Bandura states it can also produce needless distress. Expectancy learning can cause needless distress when coincidental associations or inappropriate generalizations occur. Coincidental association results when one attributes merely coincidental effects to events. This coincidental association is converted to a genuine correlation. An inappropriate generalization results when one over generalizes events associated with aversive experiences to harmless events that are similar. The more similar harmless stimuli are to those originally associated with negative consequences the stronger the generalized reactions will be (1977).

According to Bandura (1977) defensiveness may also result from expectancy learning. To increase the chances of a person correctly anticipating consequences, they must be relevant and correlated to behavior. When people's preconception of the consequences differs from actuality, behavior is weakly controlled until repeated experience instills realistic expectations. If consequences occur irregularly or unpredictably, an individual may experience defensiveness. When individuals do not fully trust what they are told, they act defensively to reduce the occurrence of aversive events. Once defensiveness has been established, it is difficult to eliminate.

Methods of corrective learning, however, have been developed for eliminating defensiveness by working with one's outcome expectancy and efficacy expectation. Outcome expectancy refers to a person's estimate that a given behavior will produce a certain consequence or outcome. Efficacy expectation refers to one's belief that he can successfully execute the behavior required to produce the outcome. The strength of this conviction will determine whether or not one will attempt to overcome a difficult situation. If he believes he will be able to handle the situation, he will behave affirmatively, but if he thinks he is unable to handle the situation, he will avoid it. The stronger one's efficacy expectation, the more active his efforts will be (Bandura, 1977).

#### *Building Self-Efficacy*

Because one's self-efficacy has such a strong correlation with performance motivation, methods for building self-efficacy have been explored. The most effective way to build a person's self efficacy is through skill achievement. This mode of treatment is based on placing a person in situations where he will succeed. Success raises one's mastery expectations. Another mode of treatment for building self-efficacy occurs through vicarious experience. Seeing others perform activities without negative consequences can create expectations in observers. For example, phobics benefit from witnessing a model gradually overcome fearful events. A widely used but weak mode of treatment is verbal persuasion. Although it is easy to use it, it simply creates expectations without providing any experiential basis for them (Bandura, 1977).

#### *Reinforcement*

In exploring reinforcement, Bandura (1977) described its two functions and its three regulatory systems. Two types of reinforcement include extrinsic reinforcement, including

consequences that are externally provided, and intrinsic reinforcement, including consequences that are internally generated. As people develop, they begin to respond to different types of incentives. For example, young children respond best to material consequences. Eventually individuals begin to regulate their own behavior through self-evaluative or other self-produced consequences. As Bandura (1977) stated, “The best way to ensure learning is to support children’s efforts until their behavior is developed to the point that it provides naturally sustaining consequences” ( pp. 103-104).

Reinforcement forms the basis for three regulatory systems of behavior including external reinforcement, vicarious reinforcement, and self reinforcement. External reinforcement, or incentives, can be presented in different ways and can have different effects on behavior. For example, a coercive incentive is presented with the idea that one will not receive the benefits unless he does x behavior. This type of external reinforcement tends to evoke oppositional behavior. Supportive incentives are presented to help a person do x. Appreciative incentives are presented in recognition of achieving x. Finally, evaluative incentives are presented according to what a person’s performance is thought to be worth. According to Ross (1976), both children and adults increased interest in activities when they were rewarded for performance attainments, but their interest in activities declined when they were rewarded irrespective of quality. What people make of the incentives rather than the incentives themselves determine how they will affect motivation. According to Bandura (1977), “Incentives should be used...primarily to promote competencies and enduring interests....Incentives encourage participation in activities that people would otherwise disregard, and thus never develop any interest in them. As involvement

and skill in the activities increases, social, symbolic, and self-evaluative rewards assume the incentive functions” (p.113).

Vicarious reinforcement follows the principle that seeing behavior succeed for others increases one’s tendency to behave similarly, and visa versa. Seeing others reinforced can function as a motivator by arousing the observer’s expectations of similar rewards. When working with a group, reinforcement aimed at the individuals within the group will promote independence; group-based reinforcement, however, will promote a sense of shared responsibility. Using a combination of individual-based and group-based reinforcement has proven to be most affective. When individuals within a group seem to be rewarded equitably, a sense of well-being is established; however, inequitable rewards promote resentment and dissatisfaction. A reward to one person can function as a punisher when contrasted with more attractive awards for others (Bandura, 1977).

Self-reinforcement is a process in which individuals maintain their own behavior by rewarding and punishing themselves according to self-prescribed standards. Behavior is regulated through the interaction of self-generated and external influences. Most behaviors are regulated through these self-produced consequences. One’s past behavior is continuously used to compare against ongoing performance, as people raise their standards after success and lower their standards after repeated failure. Social comparison also serves an important function within the self-reinforcement process. Within our competitive society, one person’s success can represent another person’s failure. People learn to evaluate their own behavior by how others have reacted to it.



While external influences play a role in self-reinforcement, people take pride in their accomplishments when they attribute them to their own efforts and ability, not when they attribute them to external factors. Further, self-rewarded behavior tends to be maintained more effectively than if it has been externally reinforced. An action, however, typically produces both internally and externally generated consequences. External reinforcement has the greatest influence when it is consistent with a person's self-produced reinforcement. People can be conflicted, however if they are socially rewarded for an action that they personally devalue (Bandura, 1977).

Dysfunctions of this self-evaluative system may also arise. When one internalizes severe or unattainable standards for self-evaluation, this may result in depression, chronic discouragement, and feelings of worthlessness. High aspirations do not produce this discouragement, however, if attainments are measured against smaller, more attainable subgoals rather than lofty ultimate goals (pp. 140-141). When athletes in this research study are asked to reflect on reward- and punishment-based motivations used by their coaches, they may describe behaviors as described in Bandura's Social Cognitive Theory.

### **Self-Efficacy**

Individuals with high self efficacy will expend greater amounts of energy, persevere longer in the face in difficult situations and will have greater levels of accomplishment. Self-efficacy is not interchangeable with self-esteem. Self efficacy refers to the athletes personal assessment of skill level and ability whereas self-esteem more represents a person's general feeling of worth (Murphy, 2005).

The emphasis of self-efficacy is clearly on the individual's perception of ability rather than true ability. Bandura's self-efficacy theory and Vealey's (1986) model of sport confidence emphasize the importance of self-efficacy for performance. Understanding how self efficacy develops is the first step in identifying the influence that rewards and punishment have on factors related to self-efficacy.

While psychologists have tried to define and universalize self-efficacy since the beginning of cognitive psychology, the actual meaning behind self-efficacy is unique to each individual. Its meaning lies deep in one's own development of the self. According to Malott (2005), self efficacy is a powerful regulator of behavior and success because it is a combination of self approval and social approval. The case of steroid use in Major League Baseball is a prime example of social approval. Numerous MLB players have chosen to use illegal steroids to better influence others' social opinions of themselves.

Vealey (1986) developed a model of sport confidence specific to athletes. The construct of sport-confidence was developed, including both trait (SC-trait) and state (SC-state) components. SC-trait components refer to an athlete's usual beliefs about his ability to succeed in sport, while SC-state components refer to an athlete's beliefs about his ability to succeed in sport dependent on a mood or situation. Competitive orientations in the model are based on performing well and winning, yet athletes may value of these goals more than the other (i.e., performance oriented versus outcome oriented). Vealey found that performance was a significant predictor of SC-state, which suggests that athletes internalize confidence as a result of their performance.

### *Development of Self-Efficacy*

Self-efficacy is multi-dimensional (Harter, 1986, 1988; Marsh, 1986; Marsh & Shavelson, 1985). Global self-efficacy and domain specific self-efficacy are the two types of self-esteem. Global self-efficacy refers to the general sense of worth a person holds. Global self-efficacy is the most encompassing view of self concept, it is an individual's general overview of self. Domain specific self-efficacy is the self-concept within a specific setting. Scholastic competence, social acceptance and athletic competence are all specific domains. (Harter, 1986, 1988; Marsh, 1986; Marsh & Shavelson, 1985).

Self-efficacy development begins with a simple task within a particular setting then proceeds to the next level or dimension. As self-efficacy develops within each domain, a network of domain specific self concept begins to emerge. As this network begins to emerge so does a sense of global self-efficacy. The global sense of self-efficacy is the unification of self concept within each domain (Harter, 1986, 1988; Marsh, 1986; Marsh & Shavelson, 1985).

Beattie et al. (2004) examined performance in terms of the self-discrepancy theory. The theory suggests that emotions may result from discrepancies within the self. The authors explored discrepancies in self-confidence, performance, and anxiety, as participants were asked to report their levels of self-confidence and cognitive anxiety in *The Competitive State Anxiety Inventory* (Martens, Burton, Vealey, Bump, & Smith, 1990). Participants also completed *The Self-Discrepancy* to measure ideal, ought, and feared levels of cognitive anxiety and self-confidence. A hierarchical multiple-regression showed that self-discrepancies predicted more changes in performance than did actual self-confidence,  $R^2 = .111$ ,  $F(3, 76) = 3.18$ ,  $p = .029$ .

### *The Impact of Social Interaction*

Social interaction and achievement are two components central to the development of self-efficacy. Social interaction is the influence of significant others on the individual.

Significant others can assume many roles. In the academic domain it may be the teacher. In the social setting, peers may serve as the significant other and in the sport domain the coach or parent may be the influencing figure (Gould & Weiss, 1987).

Research suggests the role of the significant other frequently changes as the child develops. At younger ages (ages 8 & 9) children tend to see their parents as the most significant source of feedback. Older children (ages 10 to 14) rely on social comparison with peers as the primary source of social interaction. Scanlan (1982) also found that in early and middle school years the child will look to significant adults when making social evaluations. Additionally, Scanlan postulated that as the child moved into later childhood and early adolescence he/she relied on social comparison with peers for relevant social interaction. The focus in the interaction is both who the influencing agent is and the reinforcement the child is receiving from the significant other. The reinforcement appears in two forms, praise or criticism, and social comparisons (Gould & Weiss, 1987).

Praise or criticism is usually given from an adult holding a supervising position over the child (teacher, parent, coach). This reinforcement is what initiates the development of the child's self-efficacy. Criticism leaves the child with feelings of failure. Inversely, praise allows for feelings of success. These feelings are then internalized into how the child feels he or she is being perceived. These perceptions begin to assimilate into the child's sense of worth in that situation or domain (Gould & Weiss, 1987).

Social comparison refers to an individual's social interaction with his or her peers. People compare themselves to others and in doing so, a sense of relativity is proposed. Individuals are able to view their behaviors in comparison to others. This comparison acts as a measure of how they are doing and how others feel about them. The social comparisons will result in individuals feeling good or bad about themselves relative to their perception of how they compare to peers. Once again this feedback is internalized and stored in the concept of self whereas competition serves as a process of social comparison. (Scanlan, 1982).

#### *The Impact of Achievement Effect*

Achievement is a central component in self-efficacy. According to Cooley (1902/1956), achievement or competence directly influences the developing self-efficacy. The effect of achievement depends on how individuals attribute the achievement and if the achievement is perceived as important. Achievement is attributed either to internal variables or to external variables. Internal attributions of success are ability, strategy and effort. External attributions of success are luck, chance or lack of task difficulty. When achievement is externally attributed, self-efficacy is not affected; however, when achievement is internally attributed feelings of worth result. The individual's self-efficacy is affected in a positive way.

How individuals perceive the achievement influences how they about it. If the achievement is seen as optimal to the individual, then the achievement will have a positive effect on self-efficacy development. The positive effect of achievement occurs if the task difficulty matches individuals' abilities. This matching is referred to as optimal challenging (Harter, 1978). If individuals see the task as too easy or too hard then achievement does not effect evaluations of

self. An individual dismisses the success or failure. However, if the task difficulty and an individual's ability match (optimal challenge) the results affect the developing self-efficacy.

Gaines et al. (2005) conducted a study to examine the relationship between social comparison and praise in female undergraduate students. Participants completed an intellectual task, after which they received different types of praise. The study utilized a 2 (norm information) x 3 (type of praise) design, in which half of the participants were shown performance norms suggesting that they performed better than the majority of the participants. After completing the task, participants were either given no praise, comparison-free praise, or praise with social comparison.

In the comparison-free praise condition, participants were told, "Nice job!" In the social comparison praise condition, participants were told, "Nice job! In fact, you've done one of the best so far!" The dependent measure used in the experiment was *Feelings of satisfaction based on performance*, a 5-item measure to tap into participant's positive feelings and satisfaction based on their performance. The authors conducted an ANOVA and found a main effect of norm information  $F(1, 135) = 6.06, p = .01$ . Results showed that when no norm information was given, praise only enhanced satisfaction when social comparison was present. Further, the participant's perception of superior performance had a mediating effect on social comparison and feelings of satisfaction. Implications of this study suggest that social comparison plays an important role in performance satisfaction.

The influence self-efficacy has on increasing work ethic, perseverance and achievement has motivated much research to identify the core factors in self-efficacy development. Mastery experiences (success at a given task), vicarious experiences (watching others achieve success at a

given task), verbal persuasion statements (a trusted individual expresses confidence in the potential for success at a given task) and physiological states (increased physiological arousal in preparation for attempting a given task) are the four components responsible for self-efficacy development (Bandura, 1977, 1986, 1997).

As an individual prepares for performance, typically multiple sources of influences are present on self-efficacy (Caruso & Gill, 1992; Gould, Hodge, Peterson, & Giannini, 1989; Harrison, Fellingham, Buck & Pellett, 1995; Pellet & Lox, 1998). Yet, existing literature confirms the single greatest influence on the development of self-efficacy is mastery experience while vicarious experience and verbal persuasion play a significant but lesser role in self-efficacy development (Bandura, 1986, 1997; Feltz, Landers, & Raeder, 1979).

According to Bandura (1997), performance accomplishments are the most influential sources of self-efficacy, as they are based on one's own mastery experiences. These experiences affect self-efficacy based on how the individual views the experience. Bandura further states that greater efficacy value will be placed on performance accomplishments on difficult tasks, tasks undergone without assistance, and tasks completed without repeated failures; while easy tasks, tasks accomplished with external help, and tasks completed with repeated failures carry less efficacy value. Bandura also describes persuasive techniques often used by coaches to influence an athlete's self-efficacy (e.g., verbal persuasion, evaluative feedback, expectations, self-talk, and positive imagery). While persuasive techniques do not have as much of an effect of self-efficacy as performance accomplishments, the debilitating effects of these persuasive techniques are more powerful than the enabling effects. It is difficult to increase self-efficacy by persuasive techniques alone. Bandura argues that in addition to persuasive techniques, coaches should also

structure activities through which the athlete can experience success (Bandura, 1997). Bandura also comments on the ways self-efficacy influences behavior. He states that self-efficacy beliefs only influence behavior when incentives are in place to perform and the skills necessary for successful performance are in place (1997). In addition, Bandura noted that successful athletes' self-efficacy requires a certain resilience in order to persevere over failures, setbacks, and pressure. He states that experience with setbacks and failures may aid in developing a stronger self-efficacy, yet more research on the subject is needed.

Feltz and Lirgg (2001) conducted a review of self-efficacy research on athlete populations. Most studies showed a significant relationship between self-efficacy and performance. Further, performance variables were typically shown to predict self-efficacy more strongly than self-efficacy was shown to predict performance. Overall, studies conducted on self-efficacy and performance using athletes have shown that self-efficacy is a predictor of performance, especially when used in combination with other cognitive training variables. Further, high self-efficacy has been correlated with low pre-competitive anxiety, effective goal-setting, and positive affect.

Although mastery experience is the greatest single determinant of self-efficacy development, it has been shown that a combination of mastery experience, vicarious experience and verbal persuasion increases the positive influence on enhancement of self-efficacy. Studies have shown that mastery experience in combination with one or both of the other two mentioned determining factors (vicarious experience and verbal persuasion) increases the development of self-efficacy (Bandura, 1997; Ewart, Taylor, Reese & DeBusk, 1983; Taylor, Bandura, Ewart, Miller & DeBusk, 1985).



Feltz, Chase, Moritz, and Sullivan (1999) used Bandura's work to develop a model of coaching efficacy. The model consists of four dimensions of coaches' efficacy beliefs including the ability to motivate the athletes, instructional technique, game strategy, and character building. The authors developed the Coaching Efficacy Scale (CES) to measure the aspects of their model. Feltz et al. found that coaching efficacy positively influenced athlete satisfaction and performance.

This study will focus primarily on the combination of mastery experience and verbal persuasion as they sustain the main exploratory intent of identifying the impact of coaches using positive reinforcement and / or punishment on self-efficacy development and performance. Hollembeak and Amorose (2005) identified a direct relationship between coaching methodologies and the development of self-efficacy (perceived competence). Research identifies mastery experience and verbal persuasion as significant determinants of self-efficacy measures. Coaching methodologies greatly influence the type of verbal persuasion and the amount of performance mastery an athlete experiences.

#### *Intrinsic Motivation, Coaching Methodologies and Performance*

Existing literature strongly supports a positive relationship between self-efficacy and performance (Bandura, 1977; Bandura, 1997; Bandura, 2001; Bandura & Locke, 2003, Boyce & Bingham, 1997, Spray, Wang Biddle, & Chatzisarantis, 2006; Wayment, 2002; Wise & Trunnell, 2001). In addition, self-efficacy determines what tasks people will attempt, how much energy they will expend on the achievement of those tasks and how long they will continue trying in the face of adversity (1986, 1997).

Research identifies a direct relationship between an individual's internal motivation and mastery experience. Intrinsically motivated individual's work harder and experience more performance mastery than individuals who are not intrinsically motivated (Hollebeak & Amorose, 2005; Vallerand, 1997; Vallerand and Losier, 1999; Weiss & Ferrer Caja, 2002).

McAuley, Duncan, and Tammen (1989) designed a confirmatory factor analysis to assess properties of the Intrinsic Motivation Inventory (IMI; Ryan, 1982). Male and female undergraduate students participated in pairs in a basketball shooting game during which one attempts to successfully make a shot to force one's opponent to successfully replicate the shot. If the opponent fails to replicate the shot, he receives a penalty. The first player to receive 3 penalties loses the game. After completing the game, participants completed the IMI. The IMI consisted of 18 items (4 subscales) scored on a Likert scale. The 4 subscales include Interest-enjoyment, perceived competence, effort-importance, and tension-pressure. The author conducted a factor analysis to confirm these 4 subscales as well as a second-order factor (intrinsic motivation).

Hollebeak and Amorose (2005) looked at the relationship between perceived coaching behaviors and athletes' intrinsic motivation, mediated by perceived competence, autonomy, and relatedness. Male and female university athletes were given a questionnaire consisting of the following measures: the Leadership Scale for Sports [LSS; assessing the coach's decision making styles (democratic and autocratic), the coach's motivational tendencies (social support and positive feedback), and the coach's instructional tendencies (training and instruction); Chelladurai & Reimer, 1998]; Sport Motivation Scale [assessing intrinsic motivation to know, intrinsic motivation to accomplish, intrinsic motivation to experience stimulation, and the

athlete's motivation for practicing his sport; Pelletier et al., 1995]; Perceived Competence at one's sport (Amorose 2003); Autonomy (Deci & Ryan, 1985); and Feelings of Relatedness Scale [assessing the extent to which the athlete agrees with statements about his personal relationships with coaches and teammates; Richer & Vallerand, 1998]. Preliminary statistical analysis showed a positive relationship between intrinsic motivation and perceived competence, autonomy, and relatedness. Further, autocratic coaching behavior was negatively correlated with intrinsic motivation, while all other coaching behaviors were positively correlated to intrinsic motivation. Positive Feedback was shown to be a predictor of Feelings of Relatedness and Perceived Competence, yet a negative relationship existed between Positive Feedback and Perceived Competence.

The two most prevalent coaching methodologies are positive reinforcement (the use of reward to influence behavior change) and punishment (using punishment to create behavior change). Historically there is great research to support the idea that positive coaching produces more internally motivated athletes who will hence experience more mastery experience which will in turn positively impact the development of self-efficacy (Amorose & Horn, 2000; Whitehead and Corbin, 1991).

#### *Task-oriented vs. Ego-oriented Athletes*

According to Nicholls & Miller (1984), ability is demonstrated as an individual's past performance, gains in competency or as capacity in relation to others. Traditional views of positive reinforcement emphasize coaching in a task-orientated manner while punishment focuses more on ego-orientation. "A task involving motivational climate is an environment in which athletes are reinforced by the coach when they experience improvement, work hard and

help each other learn, and believe that each team member contributes to the team's efforts. In contrast, in an ego-involving context, athletes perceive that poor performance and mistakes will be punished" (Newton & Duda, 1999).

Newton and Duda (1999) examined the interaction among perceptions of the motivational climate, goal orientations, and perceived ability by administering a survey to female adolescent volleyball players. One measure included in the survey were the Perceived Motivational Climate in Sport Questionnaire-2 (PMCSQ-2; Newton & Duda, 1998), to assess players' perceptions of how their team's motivational climate is characterized in terms of perceived task-involving climate and perceived ego-involving climate. Perceived task-involving climate reflects an emphasis by the coach on player effort and improvement, cooperative learning, and the importance of each player to the team. Perceived ego-involving climate includes feelings that mistakes are punished, the coach focuses on the most talented athletes, and that team rivalry exists. Other measures included in the survey were the intrinsic motivation inventory (IMI; Ryan, 1982), Beliefs About the Causes of Success in Sport Questionnaire (BACSSQ; Duda & Nicholls, 1992; Duda & White, 1992; Nicholls, Patashnick, & Nolen, 1985), and Perceived Ability Scale (Nicholls & Miller, 1984). The BACSSQ assesses the extent to which players feel that their success is a function of effort or ability. The Perceived Ability assesses the athlete's perception of ability specific to his sport. The authors employed a regression method to explore the interactions between the measures.

Newton and Duda (1999) postulated that task-oriented athletes learn that working hard and improving will lead to greater team satisfaction thus contributing to greater self-efficacy. Ego-oriented athletes are taught they will be punished if they lose which leads to performance

anxiety, boredom and decreased self-efficacy. Positive reinforcement or task-oriented coaching teaches athletes to value effort whereas aversive control or ego-oriented coaching teaches athletes to value ability or results. Newton and Duda's findings indicate that an effort focus (task orientation) produces more skill achievement than a result focus (ego-orientation).

### **Positive Reinforcement, Self-efficacy and Performance**

Vast amounts of research exist to support the benefit of positive reinforcement as an effective coaching methodology. Researchers agree that rewarding effort and improvement (task-orientation) helps develop self-efficacy that in turn improves skill mastery and achievement. Amorose & Horn (2000) examined the relationship between internal motivation and coaching styles. Coaching styles were identified by using the Leadership Scale for Sports (LSS) questionnaire which was developed by Chelladurai and Saleh (1978, 1980) and the Coaching Feedback Questionnaire (CFQ) designed by Smith, Smoll, and Hunt (1977). The CFQ includes coaching feedback categories such as praise, nonreinforcement, reinforcement, technical instruction, mistake-contingent encouragement, ignoring mistakes, corrective instruction, punishment, and corrective instruction combined with punishment.

#### *Feedback from Coaches*

Challadurai and Saleh (1980) developed the Leadership Scale for Sports (LSS), assessing five dimensions of coaching behavior (Training and Instruction, Democratic Behavior, Autocratic Behavior, Social Support, and Positive Feedback). In order to refine the measure, the questionnaire was administered to male and female university students enrolled in a physical education class and male varsity athletes. The physical educated students responded to items about their preference for certain leader behaviors, and the athletes responded to two different

versions (one asking about their preference for certain leader behaviors, and one asking about their perceptions of their coaches' actual behaviors. These 3 versions (the physical education students, the athlete's preference, and the athlete's perceptions) were analyzed separately using confirmatory factor analysis. Five factors were extracted from each of the sets of data, which accounted for 41.2%, 39.3%, and 55.8% of the variance, respectively.

The authors then selected certain items that had high loadings in each of the 3 versions to constitute each factor, resulting in a 40 item scale (13 items for training and instruction, 9 items for democratic behavior, 5 items for autocratic behavior, 8 items for social support, and 5 items for positive feedback). The authors interpreted the factor Training and Instruction as the ability of the coach to improve the performance level of the athlete. The factor Democratic Behavior was interpreted as the extent to which the coach includes the athlete in the decision-making process. Autocratic Behavior was interpreted as the extent to which the coach emphasizes his authority to the athletes. The fourth factor, Social Support, was interpreted as the extent to which the coach satisfies the interpersonal needs of the athletes. The authors interpreted the last factor, Positive Feedback, as the extent to which the coach complements and shows appreciation for the athletes and their performance.

Allen and Howe (1998) examined the relationship between athlete ability, coach feedback, perceived competence, and satisfaction among female field hockey players. The athletes completed the *Perceived Coaching Feedback* questionnaire (Smith, Smoll, & Curtis, 1978), modified to apply specifically to field hockey. This measure includes 10 categories, four of which represent behavioral responses to athlete's positive performance (i.e. praise only, no response, information only, and praise combined with information), and six of which represent

behavioral responses to athlete's negative performance (i.e. encouragement only, no response, criticism, corrective information, encouragement combined with corrective information, and criticism combined with corrective information).

The athlete's coaches completed the *Estimate of Player Ability*, consisting of a 4-point scale from “top 25% of players” to “bottom 25% of players.” The athletes also completed the *Self-Perceptions of Ability* (Harter, 1988), a 5-item measure in which scores range from high perceived competence to low perceived competence. Lastly, athletes completed the *Satisfaction With Coach and Team Involvement*, a six-item measure rated on a 7-point Likert scale from very dissatisfied (1) to very satisfied (7). The authors conducted a hierarchical regression to show that athlete's higher perceived confidence was related to higher ability, frequent praise and information, and less frequent encouragement and corrective information.

In addition, Allen and Howe conducted a canonical correlation to show that after a good performance, higher ability, frequent praise and information were correlated with greater satisfaction with the team and coach, while after an error, frequent encouragement and corrective information were correlated with greater satisfaction with the team and coach. This study has important implications, as the frequent uses of coach feedback and encouragement is generally regarded as positive, yet this study shows that encouragement and instruction was related to lower perceptions of competence in athletes.

Amorose and Horn (2000) examined athletes' intrinsic motivation and perceptions of their coaches' behavior. Male and female Division I athletes completed a demographic questionnaire, the Intrinsic Motivation Inventory (IMI), the Leadership Scale for Sports (LSS) and the Coaching Feedback Questionnaire (CFQ), to assess their perceptions of their coaches'

behavior. The authors identified that the positive encouragement coaching style included coaching statements such as, “great play, now you’re keeping your eyes on the ball,” “hang in there, you’ll do better next time” and you dropped your elbow, next time keep it up.” Punishment oriented coaching include such sample statements as, “that was a really stupid play” and “how many times have I told you to extend your elbow?” To explore intrinsic motivation and coaching behavior, a multivariate multiple regression was conducted, using the scores from the five subscales of the IMI as the dependent variables, and scores from the five subscales of the LSS and the three factor scores from the CFQ as predictor variables. Separate analyses were performed for males and females because preliminary analyses showed that they differed in intrinsic motivation.

Results showed that the set of predictor variables could explain a significant amount of the variance in males' intrinsic motivation, Wilk's lambda = .57;  $F(45, 830) = 2.43$ ;  $p < .01$  and in females', Wilk's Lambda = .58,  $F(45, 776) = 2.22$ ,  $p < .01$ . The results further indicate that athletes training with coaches who operate from the positive encouragement coaching style will have significantly higher levels of internal motivation than those athletes receiving punishment oriented feedback. However, Horn later identified a negative relationship between the sole use of positive reinforcement (as a coaching methodology) and perceived competence (self-efficacy). This research suggests the possibility that a balance of positive reinforcement and punishment may be ideal for the ideal development of self-efficacy (Horn, 2002).

Anshel and Hoosima examined gender differences in the effects of positive and negative feedback on causal attributions and motor performance. Male and female undergraduate athletes and non-athletes were randomly assigned to receive either positive or negative feedback.



Participants were asked to complete a motor task and given bogus feedback about their performance. Positive feedback consisted of phrases such as, “Good job, you beat the best time for that trial.” Negative feedback consisted of phrases such as, “That was poor; you did not beat the best time for that trial.” After the motor task, subjects completed the Causal Dimension Scale (Russell, 1982), to determine their causal attribution for performance. Results showed that males were more stable in their response to negative feedback. Further, positive feedback resulted in more stable attributes. There was no difference in the attributes of athletes versus non-athletes. Overall, negative feedback decreased performance, and athletes performed more poorly than non-athletes in response to negative feedback. Both athletes and non-athletes performed similarly in response to positive feedback.

Studenski (1975) studied the effect of varying levels of reward and punishment on level of performance. Participants, consisting of 18-20 year-olds, completed two novel tasks (i.e. an easier and then a more difficult version of Toulouse and Pieron's Attention Test). After completing the easier version, subjects received arbitrary feedback (“poor”, “average”, or “good”) on their performance. Subjects were then asked to predict their performance on the second task. These predictions were used as measures of aspiration level (low, average, above average, significantly high). The dependent variable in the study was measured as the difference in performance between the two attention tasks. Studenski found that the effect of reward and punishment on performance varies with the intensity of the reward or punishment. The largest increase in performance occurred after moderate reward and strong punishment. Moderate punishment and very strong reward resulted in the smallest increase in performance.

### **Paradoxical Effects of Reward and Punishment**

Meyer (1992) examined the paradoxical effects of praise and criticism on perceived ability. He argues that praise can lead to an inference that the one giving the praise perceives the other's ability as low, while criticism can result in an inference that one's ability is perceived as high. The effects of praise and criticism are mediated by one's processing of the situation. Giving praise for an easy task can lead the recipient to think that he is inferred to have low ability. Meyer states that "criticism...may function as a cue for inferring that the actor's ability is estimated to be high" (1992). Meyer argues that analysis of praise and criticism needs to focus on more than just the type of reinforcement. Gonzalez-Vallejo and Bonham (2007) studied the role of feedback in aligning confidence with accuracy. The authors used a 3 (type of feedback) x 3 (repetition of question-answer pairs) within-subjects design. Participants were first shown 100 general knowledge questions with their answers from Dougherty (2001). Fifty of the questions were presented one time, and 50 were presented three times. Two days later, participants returned to answer 150 general knowledge questions, 100 of which they had studied at varying frequencies and 50 of which were new.

Participants rated their confidence that they answered correctly after each item. In the all-rewards condition, participants always accumulate points, and never receive a loss of points after a poor performance. The amount of points gained depends on the match between confidence and accuracy. In the all-penalty condition, participants always lose points, the amount of points lost depending on the match between confidence ratings and accuracy. In the moderate condition, participants gained points for matching confidence and accuracy and lost points for a mismatch. The authors conducted a multivariate contrast test with repetition frequency as the DV's and type

of feedback as the between-subjects factor. Results showed that the moderate condition, in which participants were both rewarded and punished, produced the best performance compared to the all-rewards and all-penalty conditions,  $F(6,121) = 2.34, p < .05$ .

### **Punishment, Self-efficacy and Performance**

Relatively speaking there is very little research on the relationship between punishment, self-efficacy, and performance. An exhaustive review of the literature is presented to allow the reader to determine if in fact coaches and educators have been presented with the correct tools for using punishment in a manner that would not have a negative effect on self-efficacy and performance. The majority of the current research runs parallel with the views of Albrecht that punishment should not be used by coaches as it is undermining to the overall enjoyment level of sport participation and has a negative impact on motivation (2009). Although more studies are realizing that punishment is prevalent in sports and the emphasis should be on the appropriate utilization of punishment rather than the avoidance of it altogether, very little research is being conducted on how to appropriately use it. Seifried (2010) stated “punishment should not and does not emerge as the first choice of coaches for behavior and performance modification; but it’s appropriate with careful limited use” (p. 219). However, Seifried offers very little in terms of guidelines for what the appropriate use of punishment might be. In fact his only directive given is that “players and team should understand the reasons for the punishment and the level and intensity of the behavior should match the crime or offense” (p 223).

Avila et. al. (2006) conducted a study with male university students to explore expectation development as a function of probability of punishment. Subjects were divided into 4 groups determined by scores on the Sensitivity to Punishment (SP) scale or the Sensitivity to

Reward (SR) scale (Turrubia, Avila, Molto, & Caseras, 2001). The subjects completed a computerized probability game, in which 8 preprogrammed decks yielded differing percentages of punishments ranging from 10% to 90%.

Subjects were continually asked to choose whether they wanted to continue playing with the same deck, or choose another. The authors conducted a mixed-model ANOVA using Level of Punishment as the within-subjects factor and personality group as the between subjects factor. The results yielded main effects of Level of Punishment  $F(7, 616)=288.93, p<.001$  and of Group  $F(3,88)=2.75, p<.05$ . This showed that the number of responses decreased as the percentage of punishment increased, and the group that scored low on the SP scale made more responses than the groups that scored high on SP scale, high on the SR scale, or low on the SR scale. An ANOVA was also conducted using winnings or losses in each level of punishment as a dependent variable. This yielded a significant main effect of Level of Punishment,  $F(7,616)=1344.27, p<.000$  and a significant Group x Level of Punishment interaction,  $F(21, 616)=1.89, p<.01$ . When the level of punishment was low, the group that scored low on the SP scale won more money than the group that scored high on the SP scale. When the level of punishment was high, the low SP group lost more money than the high SP group. Response times were also examined, revealing that the low SP group responded faster to punishment than the high SP group,  $t(88)=2.23, p<.03$ . Overall, the number of responses in each deck before the subject chose another deck increased as percentage of reward increased. Further, response times were faster after reward than after punishment. The authors speculated that subjects with lower sensitivity to punishment increased their expectations of reward.

As noted previously, very little research exists concerning the relationship between punishment and performance. Research indicates that punishment is not as effective as positive reinforcement because punishment produces fear performance anxiety, inhibition and lowered internal motivation (Smith, 1993). Much research does support this contention, however the research supports the findings based on the traditional view of punishment as ego-orientation (athletes are punished when they perform poorly). There are numerous studies that indicate the benefit of punishment in some form to create the most effective motivational climate.

According to Perone (2003) punishment does not have to be associated with pain, fear, anxiety or distress. “It is easy to cite instances of effective aversive control in which such negative reactions are absent. Aversive control is responsible for the fact that we button our coats when the temperature drops and loosen our ties when it rises. It leads us to come in out of the rain, and blow on our hot coffee before we drink it, and to keep fingers out of electrical outlets. The presence of aversive control in these cases clearly works to the individual’s advantage” (p. 1).

Micheal (1993) states that “learning is largely under aversive control and it is our task to make such control effective, in which case it becomes a form of gentle persuasion” (p. 120). Malott (2005) posits that aversive control is important in the management of performance and that attaching punishment to lack of effort is a necessary part of influencing motivation and performance outcomes. “Sophisticated behavioral analysts have argued against the effectiveness of punishment contingencies, their argument have been disappointingly unsophisticated and unempirical, often based on poor asymmetrical illogic” (p. 92).

Malott (2005) went on to state “contrary to the implications of cognitive motivation theorists, fear of failure is essential, if we are to maintain reasonable standards of safety, productivity and quality. In other words, sometimes fear of failure is dysfunctional but often it is functional” (p. 97). Malott argued for punishment to be used under certain conditions to retain and to improve its impact on the development of self-efficacy and skill achievement. Malott argued that effective motivational climates include conditions where easily performed tasks are present which include small outcomes with frequent deadlines.

In furthering the point Malott explained, “most laymen and all too many behavior analysts think that if a person does not do something , it is because they do not sufficiently value the outcome their actions would produce” (p. 95). It is not accurate to say that if individuals don’t try then they do not care or appreciate the potential outcome. There are times when certain individuals in certain situations need additional contingencies. “For example the person who consistently over-eats and therefore is obese does not do so because he fails to value good health... the extent to which the obese person cares should be apparent to all when that person goes to the extreme of submitting himself to gastric bypass surgery” (p. 95).

Ratner and Herbst (2005) looked at the effect of emotional reactions on switching away from likely successful options. The authors employed undergraduate students for 4 experiments to explore this concept. In study 1, participants performed a task in which they were given two choices of brokers to invest \$5000. One broker had a higher success rate than the other, and participants were asked to choose with whom to invest based on their success rates. They were then either told that their broker had succeeded in making them profit, or had failed and lost a portion of their money. Half of the participants were then asked to recall the success rates of the

2 brokers. All the participants then answered questions on how they felt about their decision. The participants who were not previously asked to recall the success rates of the brokers were then asked to do so. Finally, participants were asked to estimate how the 2 brokers would perform if selected again and asked which broker they would choose next time. The results indicated that participants felt regret their decision if their broker failed, even in they chose the better option. Participants were just as likely to switch brokers when they were prompted to recall their success rates before making the decision as when prompted after making the decision.

Further, participants chose to switch away from the decision with the bad outcome even when they indicated that their originally chosen broker would be more likely to succeed in the future. In study 2, half the participants were asked to report on the future success of their chosen broker before they made the decision of whether to switch away from the broker. The results showed that prompting a participant to report on the future success of a broker reduced the likelihood that the participant would switch to a broker that he/she felt would perform worse in the future, yet some participants switched to the other broker even after reporting that he would be less likely to succeed.

The third study examined the effects of focusing either on affect or on cognitions prior to making the decision to switch. All participants were told that their chosen broker failed, and only those participants who initially chose the broker with the higher success rate were used in the analysis. Analyses indicated that those focusing on affect had significantly higher switch rate than those focusing on cognitions. In the last study, the authors examined individual differences in the need for cognition. The results showed that those with a low need for cognition had a

significantly higher chance of switching based on affect than those with a high need for cognition. Overall, the findings suggest that regret may lead people away from the best options.

Increasing motivation through coaching methodologies is a widely accepted practice for increasing and developing an individual's level of internal drive, self-efficacy and performance. Recent findings are identifying punishment as a prevalent and under-developed coaching methodology. In practice, punishment is used quite often; however, those using it have very little knowledge about the most effective manner of utilizing it. It appears that using punishment under certain conditions in combination with positive reinforcement may help create more ideal motivational climates.

### **Positive Reinforcement and Self-efficacy**

Self-efficacy is paramount to an individual's ability to achieve. Low self-efficacy impedes motivation for achievement. When motivation to achieve is absent the self does not develop. When the individual is not motivated to better him/herself achievement is delayed or arrested (Amorose & Horn, 2000; Bandura, 1977, 1997, 2000, 2001; Bandura & Locke, 2003; Boyce & Bingham, 1997; Newton & Duda, 1999; Waymont, 2002; Wise & Trunnel, 2001). Additionally, severe psychological problems may result. Low self-efficacy can contribute to significant psychological disorders (Cooley, 1902/1956; Gould & Weiss, 1987; Smith, 1993).

Positive reinforcement facilitates the enhancement of self-efficacy by creating positive outlets of social comparison. Social interaction is present in every aspect of sport. As previously mentioned, social comparison and feedback from significant others are central components of sport. Positive reinforcement allows for the continual feedback the athlete internalizes for social comparison. Sport by nature involves a comparing of individuals' competencies (Scanlan, 1982).



Comparing allows the individual a gauge of success. Sport allows the athlete to gauge success on two levels. A comparison may be made as an individual and as a team. The aspect of team comparison is unique to the sport setting. Positive reinforcement by way of the coach's feedback ensures the individual more opportunities for positive regard (Scanlan, 1982).

Feedback from significant others (coach/parent) is prevalent in sport. Positive reinforcement functions to increase levels of self-efficacy. Praise and/or rewards have been found more effective in building self-esteem than criticism and/or punishment. Praise and/or rewards are proven to increase the enjoyment of the sport experience, athlete performance levels, and allow individuals to begin developing self-concept (Martin & Hyrcaiko, 1983; Smith & Smoll, 1990).

Skill achievement (mastery experience) is the greatest motivating factor in sport. The more an individual achieves the more he/she wants to achieve. Skill achievement and positive control are directly related. Positive affect occurs when an optimal challenge is offered and achieved. Sport allows for the manipulation of the setting rather than the individual (Bandura, 1977, 1986, 1997; Harter, 1978). This allows for more optimal achievement and in turn more positive effect.

Harter stated, "individuals are innately motivated to be competent in all areas of human achievement. In order to satisfy the urge to be competent in an achievement area such as sport, the person attempts mastery " (p. 206). If the person perceives the mastery attempt to match their ability, positive affect is possible. Perception is linked to the internalized concept of self through the type of control or motivation the coach employs. Positive reinforcement encourages

the athlete to form higher perceptions of ability, thusly, creating more options for a positive effect on self-efficacy development (1990).

Vealey's (1986) sport specific model of sport confidence states that an athlete with developed self-efficacy in sport will be able to apply this self-confidence to other situation specific tasks. This theory lends evidence for developing self-concept at primary levels in sport, such as speed, agility or balance. Positive reinforcement promotes the increased perceptions of skill achievement, social comparison, and self-efficacy. The development of self-concept is applied to other situations. The increase in self-efficacy produces higher success expectancies and skill achievement at domain specific and global arenas.

### **Punishment and Self-efficacy**

According to Harter (1978) and Vealey (1986), sport serves as the playing field for an individual's self-efficacy development. Sport allows for the necessary components for positive self-efficacy growth. The developmental aspect of sport parallels that of self-concept. Sport participation begins at the most basic domain of skills and slowly progresses to more complex global accomplishments. Sport allows for the manipulation of skills and tasks to match optimal challenges with the individual.

Punishment is said to be counterproductive to the development of self-efficacy, however available research on punishment states that there is positive correlation with skill achievement (Cooley, 1902 & 1956; Smith, 1993). Over time the negative side effects that fear and anxiety have on self-efficacy development begin to overcome the beneficial effect of skill achievement. Rather than generalizing punishment as a motivational force that should not be used, there may be benefits to understanding how to apply aversive techniques while minimizing the negative

side effects so coaches can learn to utilize punishment to influence skill development while reducing or eliminating the negative effects on self efficacy (Gonzalez-Vallejo, Bonham, 2007; Meyer, 1992; Smith & Smoll, 1990; Studenenski, 1975).

For self-efficacy enhancement, it is crucial for motivational techniques to be congruent with positive associations of skill achievement and social comparisons, while maintaining the evaluation of optimal challenge and internal attributions. Simply put, an individual must have a positive motivational experience and feel internally responsible for the accomplishment of a challenging task for the lasting positive self-efficacy to result.

The majority of negative side effects associated with punishment often result in a decrease in self-efficacy. An individual's perception of self is lowered based on the fear of failure promoted from the use of punishment (Cooley, 1902/1956; Harter, 1978; Scanlan, 1982; Smith, 1993). Even when an individual is learning new skills or improving existing skills at optimally challenging levels, the effects from punishment tend to have a negative impact on self-efficacy. Punishment encourages the individual to externalize accomplishment and internalize inability and underachievement (ego-orientation).

Motivation becomes internalized or appropriated from the external system. Self-efficacy is the product of internalized motivation. Self-efficacy is the personal belief system an individual has of one's abilities (Bandura, 1977). It is the perception of one's abilities (rather than the actual ability level) that has the greatest effect on self-efficacy. Zimmerman (2000), stated self-efficacy is a social construct, in that it does not exist without social interaction. Self-efficacy evolves in two ways. It can be an internalization of other's expectations or it can be created from within the individual. Generally, self-efficacy is an interaction between the social

situation and internal views of competence. Multiple levels of self-efficacy may exist concurrently.

Punishment is thought to promote negative social comparisons through the presence of negative feedback (criticism and/or punishment). Gould and Weiss (1987), linked punishment with negative feedback, in that, punishment encourages the individual to make negative social evaluations of self. Even if the individual is achieving at an optimally challenging level, punishment teaches the individual to perceive him/herself as not making the grade.

Many coaches and educators wonder if changing the dynamics of punishment could have a positive effect on skill achievement without the counter-productive influence on self-efficacy. (Smith, 1993; Smith & Smoll, 1990; Smoll, 1993; & Zimmerman, 2000). Observational findings indicate that when coaches use a balance of both positive reinforcement and punishment, and there is prior knowledge of expectations associated with rewards and punishment, and the punishment is administered in a non-threatening way there appears to be a positive impact on performance without the typically negative associations on self-efficacy development (Gonzalez-Vallejo & Bonham, 2007).

Creating a theoretical framework of motivational emphasis is crucial to any coach or athlete success. Too much of either motivational force could be counterproductive to positive growth. Overuse of positive control can sometimes begin to lose its positive effects by desensitizing the athlete to the praise and/or reward. The athlete may learn to only respond to positive control or may need greater and greater rewards to produce the same motivational results (Gonzalez-Vallejo, Bonham, 2007; Smith, Zane, Smoll, & Coppel, 1983).

Knowledge of expectations and outcomes are essential in athlete motivation. The athlete must have prior knowledge and agreement of behavioral expectations and specific outcomes to produce motivation. Skinner (1969), found this to be true with all behavior. The individual must be aware of punishment as well as reward for control of desired behavior change. For example, a football player will be more motivated to come to practice if he knows he will be playing in the big game. Researchers agree motivation is directly linked with effort rather than ability. Rewards and punishments will be effective, in so far as they are motivating the individual to try harder. It is the increased effort that has a positive effect on the individual's ability to perform. With this in mind, coaches might be successful in using positive reinforcement and punishment towards the manipulation of effort (Smith, Smoll, & Smith, 1989).

In addition, for increased effort to result, it is paramount the coach and athlete are congruent in the evaluation of the athlete's presiding effort. If the coach and athlete understand the expectation is to attend the entire practice in order to play in the big game they are congruent in their evaluation of effort. However, if the football player believes making it to most of the practice is sufficient to play while the coach expects the athlete for the entire length of practice, then the coach and athlete are not in congruence about the evaluation of effort. Both coach and athlete must agree that the athlete's effort is grounds for substantiated reward or punishment. The athlete will positively respond to positive reinforcement or punishment if he/she agrees with the coach's evaluation of effort. For example, motivation results when the athlete is rewarded for what he or she believes to be optimal effort, or punished for less than optimal effort (Smith, et al., 1989).

### **Summary**

The review of the literature establishes a clear need for further research. It is apparent that punishment does play a role in learning and motivation. However, coaches and educators traditionally are instructed to avoid punishment as opposed to learning how to more effectively employ it, despite the range of levels of self-efficacy, motivation, and perception of mastery among athletes. Further research could provide dynamic insights into learning and motivation, as well as, provide more healthy safe environments for the ever-growing arena of athletics and sport.

There were three main emphasis points identified within the literature review; the agentic principle (Bandura, 1977), the developmental factors associated with self-efficacy (Bandura, 1977; Cooley 1902 / 1956; Harter 1986, 1988; Marsh, 1986; Marsh & Shavelson, 1985; Scanlan, 1982; Vealey, 1986) and the current literature suggesting that punishment can serve as a significant resource for achievement while a void in research into best practices of using punishment effectively exists (Malott, 2005; Perone, 2003 Ratner & Herbst, 2005).

The agentic principle states that individuals have the ability to choose their behaviors. The choice is based on perceptions of the reinforcement rather than the reinforcement itself. One's intentionality (an individual's intention to respond) forethought (anticipation of future reinforcement), self-reactiveness (assessment of current productivity of behavior) and self-reflectiveness (predictive thinking in comparison with outcomes of their actions based on the effects other people's action produce, what other's believe and deductive reasoning) are the four major factors in determining perception. Additionally Bandura illustrates that consequence determinants (imparting information, motivating and strengthening) are only effective with skills that have already been observed or learned (Bandura, 1969, 1977, 1997).

Generally speaking Bandura's Social Cognitive Theory lays the foundation for understanding that there are predictive behavioral responses on the part of the athlete that are associated with a coach's reinforcement behavior. However, the athlete's predictive behavioral responses are based on the athlete's perceptions of how his / her behavior will influence the coach's reinforcement responses and how the coach's reinforcement responses will affect the athlete's future ability and perceptions of self (Bandura, 1969, 1977, 1997).

At the core of Bandura's Social Cognitive Theory lies the concept of self-efficacy. The research suggests that self-efficacy increases internal motivation to train and a greater ability to perform. Numerous sport psychologists consider self-efficacy to be the number one most influential variable on performance within the field of sport psychology (Anderson, 2005; Horn, 2002; Williams, 1993). Positive reinforcement and punishment are shown to at times have a positive effect on skill attainment while it is said positive reinforcement enhances self-efficacy and punishment is linked to decreasing self-efficacy (Hollembek and Amorose, 2005; Smith, 1993). Keeping in mind that the developmental components of self-efficacy are achievement effect and social comparison (Cooley 1902 / 1956; Gaines et. al. 2005; Gould & Weiss, 1987; Scanlan, 1982), a better understanding of how to utilize punishment while reducing the negative impact on self-efficacy could offer tremendous insight for improved training models concerning the use of reinforcement for improved motivation and performance.

Coaches are using punishment (Horn, 2002; Smith, 1993) and many researchers are emphasizing the benefits and needs of using punishment (Malott, 2005) without presenting coaches with resources on how athletes perceive punishment and in what situations it is most effectively used. For example Malott (2005) states "fear of failure is essential" but offers no

insight of how to create fear of failure without experiencing the negative effect on self-efficacy. Whereas research by McClellan shows the most effective method of developing fear of failure is through the use of punishment (1985).

The balance of the literature review suggests very four important trends. First, coaches use punishment (Horn, 2002; Smith 1993). Second, punishment can increase skill attainment and is shown to have a negative impact on self-efficacy (Hollembek and Amorose, 2005; Smith, 1993). Third, athletes will respond to the punishment based on their perceptions of what they view as effective (Bandura, 1977). Lastly, coaches are not being instructed on punishment and if or when it can be used to increase skill attainment without the negative effect on self-efficacy (as seen through a void in research).



## CHAPTER 3

### METHODS

A combination of positive reinforcement and punishment has been shown to increase athletes' self-efficacy, motivation, and performance (Hollebeak & Amorose, 2005; Vallerand, 1997; Vallerand and Losier, 1999; Weiss & Ferrer Caja, 2002). There is much research to support the idea that coaches using reward based motivation produce more internally motivated athletes who will hence experience more mastery experience. This in turn positively effects the development of self-efficacy (Amorose & Horn, 2000; Whitehead and Corbin, 1991). Yet less is known about punishment, causing a need for more information on the effective use of punishment in coaching situations.

Horn's (2002) research showed that athletes training with coaches who use positive encouragement will have significantly higher levels of internal motivation than those athletes receiving punishment oriented feedback. However, Horn also identified a negative relationship between the sole use of positive reinforcement (as a coaching methodology) and perceived competence (self-efficacy). This research suggested the possibility that a balance of positive reinforcement and punishment may be ideal for the ideal development of self-efficacy (Horn, 2002). Meyer (1992) examined the paradoxical effects of praise and criticism on perceived ability. He argued that praise can lead to an inference that the one giving the praise perceives the other's ability as low, while criticism can result in an inference that one's ability is perceived as high. Giving praise for an easy task can lead recipients to infer that they have low ability.

While punishment is often said to be counterproductive to the development of self-efficacy, available research on punishment indicates that there is short term positive correlation

with skill achievement (Cooley, 1902/1956; Smith, 1993). Over time the negative side effects that fear and anxiety have on self-efficacy development begin to overcome the beneficial effect of skill achievement. Rather than generalizing punishment as a motivational force that should not be used, there may be benefits to understanding how to apply effectively aversive techniques (Gonzalez-Vallejo, Bonham, 2007; Meyer, 1992; Smith & Smoll, 1990; Studenenski, 1975). Observational findings indicate that when coaches use a balance of both positive reinforcement and punishment, and there is prior knowledge of expectations associated with rewards and punishment, and the punishment is administered in a non-threatening way, there appears to be a positive effect on performance without the typically negative associations on self-efficacy development (Gonzalez-Vallejo & Bonham, 2007).

In athletics, coaches continually search for the most effective methods of motivating athletes to push themselves to train harder and more effectively in an attempt to improve competition success. Punishment and positive reinforcement are the two methods of motivational influence most widely used by coaches. Researchers have examined the role punishment and positive reinforcement play in influencing motivation. Existing literature is rich with information regarding the benefits of using positive reinforcement over punishment to create long term behavior change; however, as research confirms, punishment is an effective resource for influencing motivation and behavior. Although research exists to support punishment's motivational influence, there is great ambiguity in the literature concerning the relationships among punishment, self-efficacy, and performance.

To address the ambiguity, this study explores the relationships among punishment, self-efficacy, and performance, and attempts to identify conditions that allow for effective use of

punishment to improve performance with the reduction or elimination of the negative effects on self-efficacy development. The hypothesis guiding this research is that punishment can be used in a manner to motivate elite athletes to effective training and performance without the long term negative effects on self-efficacy.

### **Design**

Due to the nature of this research, a case study design was chosen. The case study's description and analysis properties coupled with its flexibility of combination in design and methodology make it the most desirable design to carry out the researcher's primary goal of better understanding the effect punishment has on self-efficacy and competitive performance. Further confirmation for the case study design is based on Yin's (1994) description of the case study as "an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident" (p. 13).

Merriam (1998) stated that case study design is chosen because "researchers are interested in insight, discovery, and interpretation rather than hypothesis testing...by concentrating on a single phenomenon or entity (the case), the researcher aims to uncover the interaction of significant factors characteristic of the phenomenon" (p.29). Additionally MacDonald and Walker (1977) defined the case study as "an instance in action" (p.181). Case study design was chosen over ethnography, phenomenology, and grounded theory for a host of reasons.

Ethnography was ruled out as this study does not emphasize the society or culture in which coaching reinforcement behaviors are used nor does the study focus on the attitude and

beliefs that structure the behavior of coaches and athletes. Utilizing the phenomenological design for this research would have emphasized the essence of the punishment experience whereas this study will examine the impact of reward and punishment as perceived by elite male athletes. Additionally Phenomenology was not chosen because this study required more methodological flexibility than Phenomenology offers (Merriam, 1998).

Although this study took advantage of some components of the grounded theory approach during data analysis, it was not appropriate to use grounded theory alone. Grounded theory was not used as the design of this study primarily because of the sampling procedure. This study did not use theoretical sampling but rather followed a sampling process whereas the sampling unfolded as the interviews were being completed. However the current study does have the potential to result in a theory ground in data as all coding will parallel that used in typical grounded theory (Corbin & Strauss, 1990).

While the elite level male gymnast is a constantly changing group, it nevertheless represents a bounded system ideal for case study. Specifically a collective case study (with theory building intent) represented the most ideal type of case study for carrying out this investigation. A collective case study is defined by Stake (2005) as an “instrumental case study extended to several cases” whereas an instrumental case study is used “mainly to provide insight into an issue or to redraw a generalization” (p. 445). The collective case study intends to shed light onto whether the case is “seen as typical or not” whereas typicality can be further assumed from studying a number of cases jointly as opposed to just one particular case.

According to Stake (2005) greater generalization can occur if there is a “representative selection of cases” whereas “the cases are opportunities to study the phenomena” (p. 450-451).

Stake proceeded to illustrate this point through the example of studying the phenomena of hostage taking. To create a usable knowledge of hostage taking the researcher needs to choose cases that offer the greatest insight into the specific phenomena being evaluated. For example a case of a father taking his own child hostage would not serve as the best representation of strangers as hostages, but rather would be an excellent choice for creating a better understanding of the experience of taking hostage one's own family members. In the end Stake advised researchers to "study the cases from which we feel we can learn the most" (p. 451).

### **Sample**

This study used a purposeful, criterion-based sampling strategy. The cases chosen were intended to lead to a better understanding of, and perhaps a better ability to generalize and make predictions concerning, a larger population. Participants were chosen from elite level male gymnasts, where elite level is defined as having previously (within the last five years) or currently been selected as a member of the USA Men's Gymnastics National Team. Each year there are 24 potential spots available for the Men's National Team. The purposeful sampling of the elite level male gymnast was chosen because athletes achieving the elite level are viewed by others as successful. Due to the inherent motivation to achieve success in sport and life, the elite level male gymnast holds credibility and has the potential to yield relevant information, concerning the elite level of competition than would the average male gymnast (Patton, 2002).

Although there are currently 24 national team members and literally hundreds who have been named previously as national team members, there will only be 12 participants in this study. Based on the research conducted by Guest, Bunce, and Johnson (2006), theoretical saturation typically occurs after 12 interviews in homogeneous samples. Guest et al. found that

“after analysis of twelve interviews, new themes emerged infrequently” (p. 74). Romney, Bachelder and Weller (1986) also found that smaller samples are sufficient in providing complete and accurate information within a particular cultural context.

The 12 participants were chosen based on their elite level status and availability to the researcher. Due to the fact that the researcher has worked with USA Gymnastics in a sport psychology consulting role, six of the twelve athletes were known, on an association level, to the researcher prior to the research project beginning. Coaches were not chosen to participate in the study because of the Smoll and Smith (1993) findings from their work with the Coaching Behavior Assessment System (CBAS) that found that identified “coaches have a limited awareness of how frequently they engage in particular forms of behavior, and that athletes are more accurate perceivers of actual coach behaviors” (p. 39)

To ensure confidentiality participants in the study are referred to as NT1 to NT12. Participants were identified in the research with current age and race to reflect any potential intersectional patterns that could be associated with race and age. NT1 was Caucasian and 26 years of age, NT2 was Caucasian and 18 years of age, NT3 was Caucasian and 22 years of age, NT4 was African-American and 24 years of age, NT5 was Asian and 23 years of age, NT6 was Caucasian and 28 years of age, NT7 was Caucasian and 24 years of age, NT8 was Caucasian and 20 years of age, NT 9 was African-American and 22 years of age, NT10 was Asian and 28 years of age, NT11 was Caucasian and 21 years of age and NT12 was Caucasian and 26 years of age.

### **Data Collection**

This research followed an interview approach for data collection. The data collection was comprised of 12 semi-structured open-ended interviews with elite level male gymnasts following

Witzel's (2000) problem-centered interview format (the short demographic questionnaire was not used that Witzel typically suggests as the primary researcher already had such information ). The goal of the athlete interviews was to uncover athletes' perceptions of what types of motivational strategies were used by coaches and how effective in terms of self-efficacy development and performance those strategies were. The researcher looked to uncover specific information regarding the relationships among reward, punishment, self-efficacy and performance. Additionally athletes were asked to offer insights on how coaches could use punishment to improve athlete motivation, self-efficacy and performance.

According to Witzel (2000) the interview is the most important instrument used in the data collection. The interview begins with a pre-formulated introductory question in which the interviewee is encouraged to "fill the blank" concerning their experiences and perspectives on the issue at hand. General exploration questions follow the introductory question so as to identify the thematic aspects associated with the problem. "Ad hoc questions are necessary if certain topics are left out by the interviewees" and are used to assure the comparability of interviews (p. 4).

Once interviews are complete, Witzel (2000) outlines the analysis process beginning with pre-interpretations in which the interviewer interprets the content sentence by sentence, identifying key words and concepts serving as the basis of a coding grid where case specific main topics are highlighted. Then interview texts follow a systematic contrasting through case comparison in which core categories are identified and then in turn are used in an attempt to build theory. In this context Witzel suggests using grounded theory coding strategies.

Shank (2006) contended the semi-structured interview gives researchers “latitude in how questions are asked, and in what order, but it is still the case that all interviewees are asked the same basic questions” (p. 50). In addition the interview guide serves to insure that certain issues will be addressed. The interview is designed to explore specific conceptual ideas as well as to encourage participants to introduce new conceptual information that may be pertinent to the research topic.

The questions used to guide the interview were constructed to understand the elite level athlete’s perception of their coach’s reinforcement behaviors, specifically, what meaning the athlete attached to punishment and reward from the coach and the impact the punishment and reward had on self-efficacy and performance. The interview questions are listed in Table 1.

Table 1  
Interview Questions

1. Tell me about the motivation your coach uses. What works and what doesn’t work and why?
2. Did your coach use reward when you did well in training?
3. Did your coach use reward when you did well in competition?
4. What specific types of rewards did your coach use (specific examples)
5. How often did your coach use reward?
6. How do you think your coach’s use of positive reinforcement or reward affected your performance?
7. Did the reward-based motivation affect or influence your self-confidence?
8. How did reward affect your ability to improve your skill level?
9. Did your coach use punishment with you in training?
10. Did your coach use punishment with you in competition?
11. What specific types of punishment did your coach use (specific examples)
12. How often did your coach use punishment?
13. How do you think your coach using punishment affected your performance?
14. How do you think your coach using punishment affected your self-confidence in training?
15. How do you think your coach using punishment affected your self-confidence in competition?
16. How did punishment affect your ability to improve your skill level?
17. If you were a coach would you use reward-based motivation with your athletes?
18. What types?



19. Why?
20. How much?
21. Can you give examples?
22. If you were a coach would you use punishment with your athletes?
23. What types?
24. Why?
25. How much?
26. Can you give examples?

Results of the analysis of the interview transcripts are presented in the next chapter.

### **Setting**

The setting for the participant interviews was unique for each subject. All participants chose to have the interviews done in a location of their choice or in the investigator's office. Each setting provided for a private and undisturbed environment. Three of the interviews occurred in a hotel room in Las Vegas over a weekend competition, one interview took place in hotel room in Minneapolis over a weekend competition, two interviews were conducted at the athlete's homes, and the other six interviews took place over the phone in the primary researchers office (phone interviews were conducted as a result of National Team athletes' heavy travel requirements and continuously changing training and competition schedules).

### **Data Analysis**

Following Kohlbacher's (2006) insight of increased potential and advancement of social research through the combining and mixing of research methods the data analysis implemented in this study is a combination of inductive and deductive content analysis (Mayring, 2000) and elements of grounded theory (Strauss & Corbin, 1998). Due to the infancy of this research there is a distinct need for inductive category development in that the interviews have distinct possibilities in offering and providing new perspectives into the relationship between punishment and how to most effectively apply it in terms of self-efficacy development and performance.

Kohlbacher (2006) encouraged using deductive category application in combination with previously derived theoretical aspects of analysis to further develop the text. Although there is very little historical research into best practices in terms of the use of punishment, there is substantial evidence anchored in behaviorism confirming the usefulness of punishment. Using Skinner and Bandura as theoretical backdrops for this research it is safe to assume certain categories associated with punishment, self-efficacy and performance already exist. For this reason deductive category application was appropriate.

The intent of this research was to uncover new perspectives and the possibility of new theory associated with punishment and how to most effectively use it to produce increased motivation and performance standards without negative impact on self-efficacy. In doing so there was a need to balance existing knowledge with new insights presented in the athlete interviews. Grounded theory's coding process (open, axial and selective) provided for the exploratory and theory building needs associated with this research.

Strauss and Corbin (1998) put it this way, "in open coding, the analyst is concerned with generating categories and their properties...In axial coding categories are systematically developed and linked with subcategories...Selective Coding is the process of integrating and refining categories" (p143). The final step of the selective coding process included the identification of core categories and the relationship between sub-categories and core categories. Strauss and Corbin go on to state, "it is not until the major categories are finally integrated to form a larger theoretical scheme that the research findings take the form of theory" (p.143). Following Strauss and Corbin's direction this study combined open coding, axial coding and selective coding to organize and structure data towards theory building.

### **Procedures**

Participants were contacted by the primary investigator and informed of the purpose of the study and assurance of confidentiality at which time the participants were asked if they would be interested and willing to participate in the research. All individuals were instructed that there would be no penalty or reward for participation (or lack thereof) in the research. If individuals agreed to participate, a mutually acceptable time and location to meet for the interview was arranged individually with the athlete.

The primary investigator and participant met for the interview at the scheduled time beginning with brief introductions followed again with a short summary of the purpose for the research. The participant was given an informed consent form to sign before continuation of the interview. The introduction was followed by a brief conversation wherein the researcher made it a point to avoid talking about other details of the research using avoidance techniques such as telling the participant they are the expert rather than answering participant questions concerning the research. The primary investigator then began the interview by asking the first question from the interview guide. If the interviewee introduced new concepts then the primary investigator explored in depth the ideas being discussed. The investigator is a Licensed Professional Counselor and has experience in formulating follow up questions during a one-to-one conversation. Prior to closing the interview all questions from the interview guide were addressed.

If needed, a follow up meeting would have been arranged for clarification and confirmation of the transcribed text of the interview, however there were no second interviews requested by interviewees. Upon completion of the interviews participants were thanked and

notified of the opportunity to receive copies of a summary of the final research project upon completion. Those who choose to receive a summary of the final project findings were noted and filed to have a final report sent upon completion.

Once concepts (potential candidates for categories) were identified in the transcript they were highlighted within the text and coded. Each interview has its own concept map wherein each concept derived its own strength, sign, and direction. Additionally each interview was analyzed for negative cases. Negative cases were identified in the concepts maps if they were identified. The last step was to compare interview concept maps looking for themes (or lack thereof) to help identify relationships of reliability and/or validity.

### **Limitations and Delimitations**

The main limitation with this study is that only male athletes were interviewed. While it would be interesting and useful to know about the use of punishment in women's athletics, little is known about its use with men or women. Only male athletes were interviewed for this initial study.

Another limitation with the study is there were no questions to determine if data is specific to the sport of gymnastics. Although coaches from every sport might use both punishment and reward, only the sport of gymnastics was examined for the purposes of this study. The research was focused on one sport with the intent of more fully understanding the effect of punishment as a motivational technique used by gymnastics coaches and the subsequent effect on a small group of elite athletes within the same sport. Examining one sport should help to identify the impact of punishment specific to gymnastics. The findings here might warrant future studies emphasizing the influence of punishment on performance across sports to further

our understanding of the use punishment and its effectiveness in other sports such as football, baseball, basketball, and soccer. In addition it is noted that gymnastics is largely considered an individual sport whereas results may differ when looking at the team sports mentioned above.

Due to the fact that little of the research literature has been focused on elite athletes, a delimitation of the study lies in the emphasis of only elite athletes being interviewed in this study. It is possible that the conclusions reached here for elite athletes would be very different from those reached for other participants because the level of success experienced by these athletes results in higher levels of self-efficacy and of self-confidence. All athletes participating were accomplished in the sport prior to their participation in the study.

## CHAPTER 4

### RESULTS

All athletes and coaches want to win; however, few have the motivation needed to train the long hours needed to become champions. Twelve male gymnasts were interviewed for this research study. Each of them was either a current or past USA National Team member. While coaches can influence intrinsic motivation over the long term, they predominantly manipulate extrinsic motivators to get maximum performance and effort from their athletes. For this reason, the focus of this research was to ask gymnasts about their coach's use of extrinsic motivation, or coaching reinforcement behaviors and specifically how reward and punishment affected their self-efficacy and performance.

Due to the fact that it is difficult to assess the positive or negative meaning an individual attaches to reinforcement and punishment, many researchers only recognize reward and punishment without much concern for the negative or positive polarity. For the purposes of this study, reward was defined as any stimulus, situation, or verbal statement that produces satisfaction and punishment was defined a stimulus with negative valence or a stimulus capable of inflicting pain or discomfort (Chaplan, 1985; Michael, 1975, 2005).

Due to the nature of this research, a case study design was chosen. The case study's description and analysis properties coupled with its flexibility of combination in design and methodology make it the most desirable design to carry out the study's primary goal of better understanding the impact punishment has on self-efficacy development and competitive performance. The collective case study intends to shed light onto whether the case is "seen as

typical or not” whereas typicality can be further assumed from studying a number of cases jointly as opposed to just one particular case.

The vast majority of the data analysis was spent inductively and deductively searching for meaning in each participant's response and comparing that meaning to other athlete responses and the previous research found in the literature review (Merriam, 1998). The findings in the current research yielded rich information confirming that punishment, just like reward, can be an effective motivational resource and that all twelve of the athletes believed that punishment should be a part of the motivational landscape.

The coding process included questions from each athlete being analyzed for concepts, and concept maps being created. Concepts were then linked to categories and categories were compared between cases and with the literature review research to identify potential data worthy of theory building. As previously stated, the research focused primarily on punishment however rewards based questions held a major portion of the interview focus so that the research could see a more holistic picture of what the athletes perceived as effective

### **Rewards**

The responses from the athletes confirmed much of the existing literature in terms of the importance and effectiveness of rewards on performance. Extensive research suggests that reward based coaching is helpful in terms of increasing athlete motivation, self-confidence and ability (Allen & Howe 1998; Amorose & Horn 2000; Bandura, 1977; Bandura, 1997; Bandura 2001; Chelladurai and Saleh 1978 & 1980; Horn, 2002). Consider the following athlete responses concerning the importance of reward based motivation:

(NT2) *“Yeah it impacts my self-confidence. I was happy because I knew I was doing well...Because if I know that I’m getting the rewards, I know I’m doing well so I’m kind of happier and I know that I can start doing new things and putting those into my routine so that I can be one of the top guys on the team and competitors in the NCAA. ...as long as you’re confident in yourself, and usually when you’re confident you’re happy, and so if you’re happy when you’re doing stuff, anything, homework or a routine for gymnastics, you’re gonna be doing better because it’s fun.” (Line numbers 711-716)*

(NT7) *He would tell me that he believed in me and that would make a huge difference. yea that would make a huge impact... he always made me believe that I was capable of doing it, and I think that was the most important thing for me.(Line numbers 2533-2535)*

(NT1) *“Um I, I always had a lot of self confidence, um but there were times coming through injuries and things like that where I’ve doubted my ability for an immediate goal so I was kind of getting down on myself and a lot of times (coach) would be like, look if we stick to this plan you know and we keep doing what we’re doing. By this time next year you know you’re going to be ready and you’re going to kick some ass and uh talk like that then really did help.” (Line numbers 235-239)*

Generally speaking, all 12 of the athletes interviewed commented positively about the use of reward based motivation by their coaches. Specifically, athlete responses concerning reward based motivation were broken down into two categories; rewards in training and rewards in competition.

### **Rewards in Training**

The different types of rewards in training included decreased workload (4 athletes commented-NT2, NT10, NT1, NT3), positive attention (including praise or extra coaching; 10 athletes commented-NT7, NT1, NT11, NT5, NT4, NT12, NT9, NT6, NT8, NT3), experiential rewards (such as fishing trips, lunches, dinners, or attending other sporting events together) (2 athletes commented –NT5, NT1), befriending the athlete (coach believing in the athlete, coach being honest with the athlete, coach listening and empathizing with the athlete, a coach’s happy mood) (7 athletes commented-NT5, NT7, NT1, NT6, NT4, NT8, NT2), credibility of the coach



(5 athletes commented-NT5, NT2, NT4, NT9, NT6) charts and competition games being used in training (4 athletes commented-NT9, NT5, NT4, NT12), monetary rewards (cash or gift cards) (1 athlete commented-NT5), nicer travel (1 athlete commented –NT10) and coach finding employment opportunities for the athlete (1 athlete commented –NT10). Each of these is discussed in more detail below in Table 2.

TABLE 2: SUMMARY OF REWARDS IN TRAINING REPORTED BY EACH GYMNAST

	Decreased Workload	Positive Attention	Experiential Rewards	Befriending the Athlete	Coach Credibility	Charts/ Competition Games	Monetary Rewards	Nicer Travel	Employment Benefits
NT2	X			X	X				
NT10	X							X	X
NT1	X	X	X	X					
NT3	X	X							
NT7		X		X					
NT11		X							
NT5		X	X	X	X	X	X		
NT4		X		X	X	X			
NT12		X				X			
NT9		X			X	X			
NT6		X		X	X				
NT8		X		X					

#### *Reward in Training -- Decreased Workload*

Four athletes commented that their coaches would decrease training workloads as a reward for athletes performing well in practice. All four athletes experienced this reward 20-25% of the time they were doing well in training. The following quote helps distinguish how much work loads were being diminished:

*(NT2) Instead of doing like ten dismounts on the pommel horse after you do a routine, you'll do your two routines and then move onto your next event and have like five minute period where you just relax and get ready for your next event...so maybe if I have 2 routines on horse that day—he would say, if you hit the first one, then you're done—so I really wanted to hit that first one to make it done, to make it clean (Line numbers 506-510).*

All four of the athletes commented on how reduced work load as a reward for performing well in training was motivating and enjoyable. Athletes commented on feeling excited to end practice early or wanting to put more effort into training as a result of the coach attaching the potential of reduced training as a result of good performance. However two athletes made note of not being sure it helped with ability or future performance.

*(NT3)That was really exciting. I would definitely go after it. If mark puts it out there I am going to compete and try to get out of there early. I am not sure about it affecting my ability, I had a little extra desire but I am not sure that it made me any better. I suppose maybe a little bit(Line numbers 1031-1034) .*

#### *Reward in Training -- Positive Attention*

Positive attention was characterized by the athletes as praise and / or extra coaching from the coach. Positive attention was commented on by 10 of the athletes and was by far the most common reward used by coaches. Athletes received positive attention anywhere from 5% of the time all the way to 75% of the time. Examples of positive attention include:

*(NT7)Almost always when he's around and I am doing well he will be on me giving me feedback and pushing me forward because he's there. He's coaching me. Giving me attention and trying to help (Line numbers 2444-2445).*

*(NT1)He says things like "Good, you know that was it. That was perfect(Line numbers 2978-2979) .*

*(NT4)Um yes, yes he does. One thing that he is great at is the words he chooses. Um if it was a bad turn, he would say what you could have done better, or it wasn't your best turn. But he keeps me focused on what I need to improve instead of what I am not good at and that's a big difference(Line numbers 1214-1216) .*

All ten athletes commented that the positive attention was helpful and effective in increasing how hard they worked as well as in increasing self-confidence and hence their ability to perform.

(NT4) *It is a huge impact because once I started hearing more of it (positive talk), I started changing the words that I used in my self. Now before I take my turns, I always envision what I want out of that turn, feeling what I need to do, and I perform the turn, and lets say the turn just didn't go so well, then I would get frustrated, ok you know you need to get your arms up....and I will re-assess my turn before the next turn instead of "ok, (self) you are stupid, just get it done" that's how my self talk would be before. So now it's, "come on, (self), you know what you need to do, so just focus and get it done" (Line numbers 1288-1293).*

(NT12) *I think it was very helpful when they were positive with me, you know I was more motivated to do well when I was getting positive feedback from them, first it made me feel he was taking an interest in what I was doing, and noticing that I was trying so that made me feel important, it made me feel like I wanted to please him more...yeah it started snowballing because when they would start being positive, I would start doing better, so then they would be more positive, because I started to do better and better (Line numbers 4400-4405).*

(NT9) *Praise was a huge impact on my self-confidence, when I go to competitions winning is the reward. But if I would have never have gotten praise from (coach), then that would be a different story. I think I would need praise. But right now I don't because I received so much of it over the last 14 years... you know that you got your coach to be happy with what you're doing. I think it does, I mean, growing up, if you don't get a lot of positive reinforcement at home or what you do at school, or at the gym, that would be really hard. But if you all the sudden get it from your coach for something you did amazing, that could do wonders for a kids self confidence. I know if did for mine because I didn't excel at school and I had home issues, I think it makes you a better athlete (Line numbers 3305-3312).*

(NT6) *Its huge, knowing my coach believed in me was important not to mention it kept my head up and my eyes looking forward. I would leave the gym feeling good about my work or myself because he was so positive and this made me keep coming back for more... like I said it was really important. Feeling good and having self-confidence made it easier to hit routines(Line numbers 2316-2319).*

Of the ten athletes commenting on positive attention as a reward based motivation all but two of the athletes reported their coach providing positive attention 50% of the time or more. Those athletes receiving positive attention 50% of the time or more commented much more positively about the impact of the positive attention as compared with those receiving the positive attention less then 50% of the time. The following quotes are from athletes perceiving

the reception of positive attention only 5% of the time and 35% of the time respectively when they performed well.

*(NT11) Well it's positive, it definitely brings my feeling up and motivates me. yeah, it does, especially since when they are specific, it gives you a basis, when he compared me to one of the best gymnasts in the world, it boosts my confidence. It makes a big difference. I don't do well when I am being insulted. It just feels so much better when the mood is positive and light... its much easier to hit when I am positive and (Coach) just doesn't realize this. yeah I would say that it had an impact on how I performed, not a significant impact, though, but its hard to take seriously when the next day he will call me a piece of shit (Line numbers 4208-4214) .*

*(NT8)Praise, it still makes you feel better, even if you know you were pretty far off, it still makes you feel a little better. I guess it keeps you uplifted (Line numbers 2895-2896).*

#### *Reward in Training -- Experiential Rewards*

Two athletes reported the use of experiential rewards from their coaches. The athletes listed lunches, dinners and attending outside sporting events with the coach as examples of experiential rewards. Both athletes commented that the experiential rewards were used sparingly by the coach, somewhere between 5% and 10% of the time by the coach. Both athletes felt the experiential rewards were helpful in terms of increasing effort put into training by the athlete and subsequently on ability and performance.

*(NT7) I would tend to put extra effort in and for me, he just made it real fun for me. . I think more the rewards motivated me to do it... the more effort I put in the more success I generally had. It really does matter (Line numbers 2509-2511).*

*(NT1)I'm so competitive that anytime you put something out there like that I am going to go after it so it pushed me to go after things. Maybe it sounds funny but that stuff really got my attention. I did better in those situations because it was that little extra umph that helped get my competitive juices flowing (Line numbers 50-53).*

*Reward in Training -- Befriending the Athlete*

Seven of the athletes reported their coaches utilizing befriending techniques characterized by such things as believing in the athlete, listening or empathizing with the athlete, coach being honest with the athlete, and the coach being in a good mood during training. Examples of the befriending behaviors are listed:

*(NT1) He would be like you know I know things are tough. I'm sure you're sore, you know I know you've been practicing this for awhile, um and empathizing really made me listen when he would end the conversation with look we've got an end goal here and kind of showed me how positive. If I did have a good workout that day—how positive that would be towards our end goal (Line numbers 14-18).*

*(NT2) He approaches me as a friend rather than as a coach he'll like when we're just like chalking up or getting ready to get a routine, when he's more relaxed he'll be standing there talking to you about like rock 'n roll and what's playing in the gym and just questions about the American culture. He'll talk to you like he's your friend instead of your coach (Line numbers 520-523).*

Athletes reported their coaches using befriending rewards independently of how the athlete was performing yet, athletes did agree the befriending behaviors occurred more frequently when the athletes were performing well as opposed to performing poorly as illustrated in the following athlete responses:

*(NT5) when I was doing well he would be happy and positive pretty much one hundred percent of the time but even when I wasn't doing great twenty five percent of the time he would be reminding me of past successes I've had (Line numbers 1884-1886).*

*(NT1) Coach did a nice job of being positive, I suppose it was easy when I was performing and when I was struggling he listen and empathize with me when I was down" (Line numbers 184-186).*

All seven of the athletes who experienced befriending characteristics believed that it was a good idea for coaches to do so with their athletes. One athlete's quote seemed to be representative for how all of the athletes felt about befriending:

*(NT1) yeah it's important. I would try and do it like my Coach to show these guys that I care about them and that I believe in them. That's invaluable (Line numbers 367-369).*

### *Rewards in Training -- Competition Games*

Five athletes commented positively about their coach's use of competition games during training. The athletes viewed the coach's use of the competition game as a reward in and of itself outside of the potential rewards given for those who were successful within the competition. Competition games are loosely defined as the coach creating some sort of a competition around that day's normal training.

For example, a number of the athletes commented that their coaches divided team members into teams and then awarded points to each team when team members completed training assignments successfully. Some coaches even placed a chart on the wall of the training facility to publicly track the progress of the competition and to bookmark the scores for later competitions. Two of the athletes spoke of the importance of having the charts posted;

*(NT5) it's there in black and white it's numbers, it's ah, something to reflect on, something to learn from, it charts history...I think the charts and what not really push me to, what's the word I'm looking for? Kind of on the lines of "stand out" but—it brings out the competitor in me (Line numbers 2213-2216).*

*(NT9) You know that's definitely motivating—to have something to shoot for a goal besides just training to get better (Line numbers 3096-3097).*

Two of the athletes further illustrated how the competition games are organized:

*(NT4) He put everyone's name on the board and then, and then you, you get a gold if you get like 9/10 or less in a routine deduction. You get like 8 points for that. And then silver*

*if you get 1-1.7 point off deduction, and bronze and so on and so many points. So of course you're going for that least amount of deductions and the team with the most points for the individual (Line numbers 3157-3161).*

*(NT12) there was one game that we played that worked really well. We split the team up into 2 separate teams and whichever team hit the most routines in a given week got to skip one day of morning training the following week (Line numbers 4294-4296).*

These five athletes experienced their coaches using competition games anywhere between 20% and 75% of the training time. Athletes felt the competition games were helpful in terms of increasing motivation to train, breaking up the monotony of training, as well as being important for learning to perform well under pressure.

*(NT4)When you hit with the pressure on in practice it becomes easier and easier in competition. Kind of like it's no big deal even though your on the podium it's still feels like what your used to from practice (Line numbers 1334-1336).*

*(NT12)yes, just being in the competition against other guys broke up the monotony of training, it gave us kind of a new fresh outlook on what we were doing, so it felt, you know when you would hit a routine, the rest of your team would be very excited, and that was rewarding feeling to have everyone else pumped up and really motivated to do well. Oh I would say those games were the most important things we did while we were there. well they put you in a pressure situation, and if you were able to hit your routine in that situation, I felt more confident about what I was doing if the confidence was high, then I performed better, I think everyone did (Line numbers 4312-4318).*

#### *Rewards in Training -- Monetary Rewards*

Only one of the athletes commented that the coach used the promise of monetary reward for motivation. The athlete listed examples of cash or Starbucks gift cards as monetary rewards usually equivalent in amounts of five dollars but once offered as much as one hundred dollars.

*(NT5 )like it could be as simple as 5 dollars if you hit this...or all the way to this last intersquad he said 100 dollars for anybody who hits 6 for 6 (Line numbers 1677-1678).*

The athlete did describe the monetary reward as effective and even went on to suggest that if he were coaching himself he would certainly use the monetary reward as a motivational tool.

*(NT5) believe it or not it puts a fire under our ass I think anytime you can know that you hit this same routine under pressure its good. It does carry over into competition. I don't give the kind of cash that my coach would put out there but I will put a Coke or Gatorade on the line occasionally (Line numbers 1686-1688).*

#### *Reward in Training -- Having a Credible Coach*

Five of the athletes identified the privilege of having a credible coach as a reward. The athletes commenting on having a credible coach all had coaches who were either current or former Olympic gymnastics head coaches, Olympic gold medal gymnasts, or World Champion gymnasts. Three of the athletes described it in the following manner:

*(NT5)hears the way I look at it is I couldn't be more blessed to have the head Olympic coach coaching me and at the same token you know he's achieving what I want to do in athletics he's achieved in coaching what I want to do in athletics he's reached the top of his game and therefore it gives me inspiration to reach the top of my game(Line numbers 1607-1610) .*

*(NT2)The motivation first can mean, gold medal Olympic gymnast, is a reason for us to listen to him more because he knows what he's talking about (Line numbers 463-464).*

*(NT6)I respected him. I knew from day one that he had credentials, so I'm going to listen to him (Line numbers 2277-2279).*

#### *Reward in Training -- Nicer Travel*

One athlete identified nicer travel as a motivational reward his coach used during times when the athletes were performing well. Examples of nicer travel would include the coach arranging flights over van or bus travel, staying at nicer hotels and eating at nicer restaurants



when traveling for competitions. The athlete suggested the nicer travel would be served as a reward 50% of the time and described the impact of the nicer travel in the following manner;

*(NT10)I think the result was that it made us feel like we were deserving of winning because we were gaining the same benefits that other teams were getting. Teams that were traditionally in the past beat us. So I think that's where, and I think it was more of a psychological reward in that respect. I think that made us feel as if we were as good as any other team out there, thus translating into, you know, a more confident attitude going into competition (Line numbers 3602-3606).*

#### *Reward in Training -- Employment Opportunities*

One athlete said his coach helped him find employment especially in times when the athlete was performing well.

*(NT10)You know, maybe things that were, could be construed as violations as well you know, maybe for him, but setting us up with jobs and stuff like that over the summer. So you know, you get your perks that way as well. And if anyone tells you they don't get those extra perks, then I think that's probably untrue (Line numbers 3618-3621).*

Overall the athletes' comments concerning rewards in training parallel the positive impact that previous research has shown. All twelve of the athletes made some positive statement about the use of rewards and all agreed that if they were coaching they themselves would use rewards in training to increase effectiveness.

#### **Rewards in Competition**

The different types of rewards during or after a successful performance in competition included high 5's (or high 3's or 4's, depending on the level of performance) (1 athlete commented-NT2), praise (2 athletes commented –NT9, NT11), a coach's happy/excited mood (1 athlete commented –NT7), nicer travel arrangements or equipment (1 athlete commented – NT10), and decreased workload (1 athlete commented –NT3).

The different types of rewards during or after a poor performance in competition included the coach reminding the athlete of a past success (1 athlete commented –NT5), the coach focusing on solutions in between events (1 athlete commented –NT9) and moderate praise (1 athlete commented –NT5). A summary of these rewards in competition is shown in Table 3.

TABLE 3: SUMMARY OF THE REWARDS IN COMPETITION REPORTED BY THE ATHLETES

	Decreased Workload	Positive Attention	High 5's, 3's, 4's	Befriending the Athlete	Reminding of past success	Focus on solutions	Nicer Travel
NT2			x				
NT10							X
NT1							
NT3	X						
NT7				X			
NT11		X					
NT5		X			X		
NT4							
NT12							
NT9		X				X	
NT6							
NT8							

*Reward in Competition -- Good Performance--High 5's*

One athlete reported a system used by his coach based on presenting a high five, four, or three (i.e., holding up 5, 4, or 3 fingers to slap a “high five”). The athlete reported that the coach would provide this type of reinforcement 66% of the time after a well performed routine.

*(NT2) High five is the best, like saying high five with five fingers up. But if you do a mediocre routine it'll be a high three or a high two or something like that...It helps all of us get pumped up...that positive energy helps me perform (Line numbers 541-543).*

*Reward in Competition -- Good Performance -- Praise*

Two of the athletes reported that they would receive praise 100% of the time after a good performance on an event. Examples of this praise included a comment from the coach such as “nice” or “good job” or a handshake. These two athletes discussed that the praise experienced during a competition was milder than the praise experienced during training because the athletes are focused on the performance on the next event. The athletes described their coaches’ praise during competition as follows:

*(NT9) If something goes good, he’s like, “nice,” you know, or he’ll shake my hand, but he knows right away that I’m thinking about the next event... It’s nice to hear you know but at the meets it really doesn’t matter. I know what I need to be focused on (Line numbers 3064-3066).*

NT11 explained that his coach’s praise has little effect on him because the coach’s heavy reliance on punishment.

*(NT11) At competitions, he doesn’t give those kinds of compliments, it’s more of “good job” unless something goes wrong, and then he goes into the punishment stuff... I guess I have learned to not really care about what (coach) says. Even when it’s positive I find myself not as interested in his words because of all the negative bullshit he pulls with me (Line numbers 4190-4194).*

#### *Rewards in Competition -- Good Performance -- Coach’s Happy/Excited Mood*

One athlete reported that his coach would “get excited” about 75% of the time after a good performance in competition. This excitement and happiness exuded by the coach about the athlete’s performance was seen to be highly influential in the development and success of the athlete. The athlete stated the following about his coach’s excitement after a success in competition:

*(NT7) When I did well, he would get excited. I was convinced that he knew what I was capable of, and that made me happy. That is what made me get to where I am--when he would believe in me. If he wasn’t like that and never made me feel capable, I wouldn’t have been nearly as successful as I was (Line numbers 2502-2504).*

*Rewards in Competition -- Good Performance -- Nicer Travel Arrangements/Equipment*

One athlete commented that successful performances would lead to nicer travel arrangements (e.g., nicer hotels, nicer dinners) about 50% of the time. The athlete commented that these rewards did not have much of an effect on his confidence or performance because his confidence was already so high relative to his other teammates. He did speculate that these rewards had more of a positive effect on his teammates.

*(NT10) Individually I'm not so sure it did [affect my self-confidence]. I think if anything it, I was more concerned about my team's performance. I was more worried how my team would perform versus myself. I think I was always confident personally going into competition. I was more concerned with [my teammates] because it is a team sport and you can only do so well as an individual...I think I was more concerned with, you know, the team's confidence. Because I always, 99% of the time I always felt like I was going to do great. So I think that maybe what I was more concerned about was not so much my own confidence—I don't know if I needed that so much personally. But maybe more so it was affecting my team. It did seem to be an effective tool to a certain point (Line numbers 3727-3735).*

*Rewards in Competition -- Good Performance - Decreased Workload*

One athlete reported decreased workload (in the form of cancelled practices) as a result of a successful performance in competition. This reward would occur between 15%-20% of the time during the off-season (i.e., fewer competitions) and 5% of the time during the busy part of the season. During these busy times, the athlete reported that the coach might decrease the workload during practice as a reward for a successful competition. The athlete commented on the effects of this type of reward:

*(NT3) That was always a big reward for me. The sport isn't always easy, so you get those days off, and it's enough to get you pumped up about what you are doing (Line numbers 1061-1062).*

The athlete further commented on the importance of offering this reward in a way that will not negatively affect future competition performance:

*(NT3) If you are going to give your athlete a decreased workload , you have to be smart about it, without it affecting the upcoming performance in a negative way. That is one thing (coach) is really good at. We were competing all the time...and as much as we would love a day off, we had another competition in 4 days, so maybe he would still have us come in, but decrease the workload (Line numbers 1075-1079) .*

#### *Rewards in Competition -- Poor Performance-Coach Reminding Athlete of Past Success*

One athlete reported that his coach would remind him of past success about 50% of the time after a poor performance in competition.

*(NT5) After a not so good performance, he'll take you back to a past success...and tell you to bring up some of the feelings of that past success to remind you that you have had success in the past and that this is just a moment of time in which this present moment didn't go so well (Line numbers 1739-1741).*

While the athlete states that this form of reinforcement “might help to a certain degree,” he still feels frustration about his poor performance. The coach’s reinforcement in these situations, according to this athlete, does not positively impact his self-confidence as much as his own successful performance impacts his self-confidence. The participant describes his experience as follows:

*(NT5) If I had a bad performance, I don't care how much positive reinforcement you give me. I mean, it might help to a certain degree, but it is definitely not going to alleviate all my frustration... [It] definitely [gives me] that extra kick of motivation. For me, I would say it doesn't have as much as an impact as me doing well myself (Line numbers 1770-1773).*

#### *Rewards in Competition -- Poor Performance-Focus of Solutions*

Another athlete commented that he viewed his coach focusing on solutions for the next event during a competition as a reward. 75% of the time after a poor performance during a

competition, the athlete's coach would not focus on the poor performance, but refocus attention to performing better for the next event. The athlete felt that this was an effective practice, as it encouraged him to refocus on performing well, rather than dwelling on the past performance. The athlete further commented that punishment in these situations would be ineffective because he already feels negatively when he is not performing well during a competition.

*(NT9) It doesn't help for him to ride my ass after a bad routine. It bothers me more than anyone when it's bad, so I don't need anyone on my case. It's a good way to approach it. Moving on you know to what's next, trying to get back in it (Line numbers 3086-3089).*

#### *Rewards in Competition -- Poor Performance-Moderate Praise*

One athlete commented that his coach was able to increase his confidence after a poor performance during an event before moving on to the next event by offering moderate praise. Between 60% 70% of the time after a poor performance on an event, the athlete stated that his coach would offer him kind words or praise. The athlete reported the following about the effects of this reinforcement:

*(NT5) [The praise] would bring up my self-esteem and confidence going into the next event. That definitely helps, but I am not sure just how much. Maybe a little, but it certainly didn't hurt (Line numbers 1926-1927).*

Although 2 of the athletes (NT4 and NT5) commented about the importance of rewards in competition, the majority of the other athletes downplayed the need or desire for rewards in competition. Most athletes commented that the competition itself was reward enough and was much more impactful than the coach's attempts at motivation.

#### **Rewards Summary**

In reviewing the rewards data it appears the most commonly used rewards were positive attention (11 athletes commented that their coaches used this reward based motivation) and

befriending the athletes (7 athletes commented that their coaches used this reward based motivation). All other coaching actions were commented on by five or less athletes per specific reward based action.

One could make the assumption that this study involved the best gymnasts in the country who were being coached by the best coaches. The athletes' comments indicated that their coaches were much more focused on providing rewards that either made the athlete feel good about themselves and or contributed to making the experience of training and competing more enjoyable rather than simply giving prizes for good performances. This suggests that the most successful coaches (measured by winning) in the country use rewards like praise and increasing the enjoyment of training (through the use of competition games and befriending techniques) to increase the motivation and ability of the athletes.

Typically athletes commented that on competition day there was far less interaction from the coaches and far less need for interaction from the coaches. According to nine of the athletes the coach's impact in terms of using rewards with the athlete in competition was minimal compared to coach's impact in training.

*(NT9) It's nice to hear you know but at the meets it really doesn't matter. I know what I need to be focused on...I am just not needing that from (Coach) (Line numbers 3065-3066).*

*(NT3) It doesn't really effect me or how I compete. I just don't need it (Line numbers 1068-1069).*

*(NT1) I was always so focused in the meets that what Jon did didn't really matter (Line number 69).*

There were two exceptions to this, athletes who were desiring feedback from coach after good performance and not receiving it. Two of the athletes (NT4 NT5) reported the effects of times when their coaches did not provide much reward after a successful performance during competition.

*(NT4) Not much [praise] at all. Shake my hand and tell me that I did a good job, but mostly get ready for the next event. When he tells me I've done well, it feels good. We want to know. I know for myself it was a hit routine. I want to know, as a coach, was this what you expected? Did I live up to your expectations? It helps me with confidence which is going to carry me in to the next event (Line numbers 1365-1368).*

*(NT5) There were times when he wouldn't say anything even after a hit. If I don't hear anything at all, I start to wonder... I would be left with this err of mystery, like he didn't say anything at all, you know. Was it not a hit routine in his book? How did he see it, you know? If you hit your routine and he doesn't pat you on the back, but no punishment, just doesn't say anything, it has a negative impact on my self confidence (Line numbers 1874-1878).*

### **Effective Reinforcement Conditions**

There seemed to be five conditions that appeared with more frequency and intensity from athletes in terms of what constituted an effective reinforcement (both reward and punishment)..

In each of the five conditions the frequency appeared in the data for no less than nine of the athletes commenting with an intensity level of moderate to extreme for each. The five conditions identified are; the coach's honesty, coach believing in the athlete, athlete trusting the coach, coach follow through with rewards, and congruence in coach and athlete assessment of effort.

The above mentioned conditions highlighted a research finding as the conditions were not suitable to be called rewards or punishments (for example it is difficult to categorize honesty as a reward or lack of honesty as a punishment) however the frequency, intensity and consistency used by athletes in referring to the conditions punctuated their importance. In addition, the athlete's comments suggested an increased sense of importance associated with conditions in that



it seems for the conditions to enhance motivation they need to be present all of the time rather than some of the time as seen with other concepts (for example honesty from the coach all the time is necessary for the athlete to have trust in the coach). It seems the conditions represent the importance of the coach-athlete relationship wherein the coach and athlete trust each other (honesty and follow through), they believe in each other's abilities, and they agree (congruence in assessment of effort) with one another.

Honesty from the coach appeared as a highly important factor in eleven of the twelve athletes. Athletes said things often supporting the theme that "honesty is important because everything hinges from there" even when the honesty reflected information the athlete didn't necessarily want to hear.

*(NT6) If a coach is overly or inaccurately positive, then that is not effective yes and it is a disservice to the athlete, yes but you have to have trust with your athlete, you can't say something that is not true to your athlete, because your athlete wont trust you...you want people to say, I reached my potential in life, and one of the reasons is that my coach was honest and I knew it (Line numbers 2385-2389).*

*(NT1)When he would say those things to me it really made me believe in myself. I knew he wasn't bull-shitting me either (Line numbers 24-26).*

*(NT5) If he hadn't been honest with me I would have known. Trusting Coach is important because everything hinges from there. What he said impacted me because I knew he meant it...performing is a bi-product of the training and the training was solid because of the foundation he had in place. What he said had weight and I trusted him (Line numbers 1707-1710).*

*(NT4) You have to be honest with the athletes, if not it doesn't matter what you say or do the athlete will not trust you and then they are kind of out there on their own and that just doesn't work especially at the elite level (Line numbers 1446-1448).*

*(NT9) I know for sure (coach) is always honest with me even when I don't want to hear it. I mean, he doesn't beat around the bush. If something went wrong, he'll tell ya. He'll say, "You know, that wasn't good." But he doesn't say it like, "You looked like crap today" (Line numbers 3014-3016).*

Only one of the athletes didn't believe his coach was honest with him and commented about his lack of trust with the coach:

*(NT11)I guess I have learned to not really care about what (Coach) says. Even when it's positive I find myself not as interested in his words because of all the negative bullshit he pulls with me (Line numbers 4192-4194).*

Nine athletes punctuated the importance of the coach believing in the athlete. Athletes responded with such things as "his believing in me was the most important thing" or " that was the main reason I was so successful".

*(NT1)Jon made it clear that he thought I was the best, really the best in the world and that's something when someone believes in you like that(Line numbers 25-26) .*

*(NT7)I looked back with (coach) and I think he has a great ability to motivate me and make me believe that I can do what I set out to do. I think he either did believe it or was really good at acting like he did believe it (Line numbers 2441-2443).*

The coach's honesty and belief in the athlete are concepts that re-appear in the punishment research as pre-requisites essential for punishment to serve as an effective coaching tool. In addition the concept of trust seems as necessary in that the athlete needs to trust the coach and his plan in terms of producing the desired results.

*(NT6)He would never ask me to try a skill unless he knew I could do it. Every time he asked me to go for it, he was right, so there was trust there (Line numbers 2272-2273).*

*(NT5)Well because when we're embarking on something new its uncharted territory and the coach can step in because he's almost like a navigational map in terms of his mind I say (coach), he kind of has the passed mapped out and can basically point to an area on that map where you have had a success in acquiring something new or doing something new well by reminding the athlete that you're going into uncharted territory here and as a coach, here's a map of your passed history to show you where you have done this well so it gives you confidence in going into that uncharted territory (Line numbers 1900-1905).*

*(NT4) Honestly sometime I just want to hear “that was bad” ... Because (coach) was straight up I felt confident in myself and what he said. I performed well because I trusted (coach) and his plan for me...(Line numbers 1430-1432),*

*(NT9) I know (coach) is going to be honest with me so I trust him and that trust is important. It makes me feel good about the training, you know I can believe in what is going on day to day...(Line numbers 3016-3018).*

Follow through by the coach was only commented on by one athlete. However the athlete that spoke about it was doing so in terms of lack of follow through by the coach. Due to the intensity of the athlete's displeasure about the lack of follow through it suggests the other eleven athletes did not experience a lack of follow through but rather that their coaches were in fact following the honesty guidelines when they promised a reward or consequence, they followed through.

In addition the concept of congruence in assessment of effort between coach and athlete was commented on by nine athletes. Athletes identified the importance of being rewarded for things they believed they should be rewarded for as opposed to being given rewards for something of low importance.

*(NT10) I honestly don't know if it was that effective because the reward was based on, you know in a group setting, as a team reward, it was pretty much you know, you hit your routine and that was it. And the problem with that is that for some of us, the routine was below what some of us were capable of doing. So on an individual skill level, it really didn't push us that much (Line numbers 3754-3757).*

*(NT6) If a coach is overly or inaccurately positive, then that is not effective yes and it is a disservice to the athlete, yes but you have to have trust with your athlete, you can't say something that is not true to your athlete, because your athlete won't trust you (Line numbers 2385-2389).*

It appears that the coaches who use rewards to establish a solid foundation of belief and honesty with their athletes are producing an increase in athlete self-efficacy and performance.

Additionally it appears the coaches use of rewards helped develop the foundation of trust in the coach and in the coaching plan.

### **Punishment**

There is little research available for coaches to learn what methods of punishment are effective in terms of motivation development and performance. Coaches may be inclined to use punishment in the absence of research contradicting its use and because their coaches may have modeled punishment as an effective motivational tool with them. The available research indicates that punishment is not as effective as positive reinforcement because punishment produces performance anxiety, inhibition and lowered internal motivation. Much research does support this contention; however, there are numerous studies that indicate there is a benefit of punishment in some form and necessary to create the most effective motivational climate.

Perone (2003) suggested that punishment is responsible for the fact that we button our coats when the temperature drops and loosen our ties when it rises. It leads us to come in out of the rain, and blow on our hot coffee before we drink it, and to keep fingers out of electrical outlets. The presence of aversive control in these cases clearly works to the individual's advantage" (p. 1).

Malott (2005) posits that aversive control is essential in the management of performance. Attaching punishment to lack of effort is a necessary part of influencing motivation and performance outcomes. "Sophisticated behavioral analysts have argued against the effectiveness of punishment contingencies, their argument have been disappointingly unsophisticated and unempirical, often based on poor asymmetrical illogic" (p. 92). Researchers like Malott argued that there are times when certain individuals in certain situations need additional contingencies.

## Punishment in Training

The different types of punishment used in training were increased workload for poor performance (8 athletes), bad mood (1 athlete) decreased competition time (1 athlete) increased workload, bad mood, sitting out for broken team rules (4 athletes), revoked financial support (1 athlete) and negative talk (screaming, name calling 7 athletes)

TABLE 4: SUMMARY OF PUNISHMENT IN TRAINING REPORTED BY THE ATHLETES

	Increased Workload	Bad Mood	Increased Workload, Bad Mood, Sitting Out (Broken Team Rules)	Revoked Perks	Negative Talk
NT2	X			-	
NT10	X			X	X
NT1	-	-	X	-	X
NT3	X	-			X
NT7		X		-	X
NT11	X	-			X
NT5	X	-	-	-	X
NT4		-	X	-	X
NT12	X	-	-		-
NT9	X	-	X		X
NT6		-	X	-	X
NT8	X	-		-	

For years coaches of all levels have witnessed the sheer power that punishment has on influencing an athlete's behavior. Unfortunately many coaches aren't keen to the insights that punishment may produce short term benefit at the expense of long term counter-productive effects of damaged self-efficacy and hence poor performance. The research in this study attempts to uncover whether there is a more effective method of using punishment, one that contains the positive effect of influencing short term behavior change without the negative long term effects on athlete self-efficacy and performance.

*Punishment in Training -- Increased Workload*

Eight athletes commented on their coaches using punishment in training anywhere between 10% of the time all the way up to 70% of the time when they were performing poorly. According to gymnasts one of their coaches used increased workload 10% of the time, two coaches used increased workload 20% of the time, two coaches using increased workload 75% of the time, one coach used increased workload 55% of the time, one coach used increased workload 65% of the time and one coach used increased workload 70% of the time as a punishment in training. Examples of increased workload are as follows:

*(NT10) if we didn't do well, workload was increased in practice. Well we had some early practices, certainly if a certain group or a certain event didn't do well, or the whole team. We would certainly have extra practice times and we would come in for practice very early in the morning. Some of that was certainly more of a thing that was used as a punishment. You aren't leaving this event until you hit one—that's something popular I've heard in the past (Line numbers 3811-3815).*

*(NT9) this was right before the Olympic trials in 2000, I felt like crap, I couldn't hit a high bar routine, and he was yelling at me, and he finally said, if you don't hit this routine, you cant win this event, so I stayed there 30 minutes and finally hit a routine (Line numbers 3333-3335).*

*(NT5) Well I can give you an example, well you know, I was told by (coach) one time, "Don't leave here until you hit a pummel horse routine." And I was struggling you know, stuff was hurting and I'm sitting here wondering how in the world I'm going to hit a pummel horse routine. And he's kinda just standing there and uh, it this happened with (college) as well. You're pretty much at a pretty low point at that point. It's humiliating, the guys are watching, you don't feel good about your gymnastics, it's a rough day, and it's on that fifth try when you actually ending up do hitting the routine and the coach comes back and praises that moment that see, you know, after all that, you know, you come back and you hit a pummel horse routine that's what I wanted you to do in the first place, see you can do it when you are absolutely at you're worst (Line numbers 2139-2147).*

When asked whether they would use punishment if they were a coach, all eight of the athletes reported that they would use increased workload as a punishment although there were mixed feelings on the effectiveness of their coach's use of increased workload as a punishment.

Two of the athletes whose coaches used increased workload 20-25% both agreed it was an effective use of punishment in practice.

*(NT9) that right there alone was probably the biggest jump of my success I think , my confidence in competition, it was so easy, it grew instantly, just because I went through that low point, where I can't do that at all and it was impossible, and then I did it and it was like, if I can do it now, I can do it anywhere, easy... because even though I was scared in that moment, he made it clear to me that I could do it. I trusted him and he had laid such a strong foundation of support and positive, that when he did use the punishment, I still felt supported and strong I know that is what is going through his head, he wanted it for me, and he had that in his eyes that he knew I could do it, and I was like shit I've got to do it, I can do it in a way(Line numbers 3335-3342).*

*(NT5) I think some kind of punishment used properly is very very helpful. It's one, making me physically stronger, two its breaking me down emotionally and I still have the rest of the workout to do, and three, it's creating this large event in my training where I don't want to be put in that situation again (Line numbers 1970-1973).*

Two of the athletes felt the increased work load was not an effective punishment. One of the athletes that didn't feel increased workload was helpful had a coach who used increased workload fifty five percent of the time.

*(NT12) When I was trying to avoid getting more routines to avoid the punishment, I don't know it was different, it felt like I was more disappointed in myself if I didn't hit the routine...it wasn't just me that was disappointed, I could see that the coaches were disappointed too. ...and I would crumble under the pressure that I was putting on myself yea maybe it was trying too hard or just puttin the pressure on myself, I wouldn't swing as freely or I wouldn't be loose when I was swinging, I'd tighten up and I'd be nervous up there (Line numbers 4499-4504).*

Although the second athlete who had a negative view of the impact of his coach's use of increased workload only received it 20% of the time, the athlete felt his coach was much more negative and punishment oriented in his coaching. In fact he believed his coach used punishment based motivation 90%-95% of the time.

*(NT11)I think it definitely has a negative effect on me, it takes my focus off of things, It just takes my focus off of what I am doing. Instead of focusing on my routine...with the*

*negative stuff, you can't just take that and move on from it one minute later... and if you are pissed off, you are not going to have a good practice (Line numbers 4132-4137).*

The remaining four athletes all believed the increased workload could be an effective form of punishment if used appropriately. All eight of the athletes seemed to agree that the appropriate use of increased workload as a punishment had to do with a previously positive relationship with the coach, trust that the punishment was actually going to help them become a better gymnast and that the coach use of the punishment was in congruence with the athlete's belief that the athlete wasn't giving their best effort.

*(NT3) yeah, I think punishment can do one of two things. Either you receive punishment, and you know you did a bad job and you need to step it up for yourself and your team, or it is discouraging because you may feel like you are doing a good job, so you are discouraged because you feel like there is nothing I can do well (Line numbers 1114-1117).*

*NT9)I won't use any punishment without building them up first I won't do it because I know it just won't work Line numbers 3534-3535).*

*(NT11)if someone really isn't putting their effort into it, then it would be appropriate...if the whole team was not trying and hung over, then maybe there would be a cardio punishment or a strength punishment I would only do it when I felt it was really deserved Line numbers 4261-4263).*

*(NT7) sometimes I could work harder and sometimes it would just piss me off. If I felt like I wasn't doing my best art ring as hard it would help but If I was already busting my ass it would pretty much ruin the day... yeah on those days when I wasn't giving my all I would step up and that punishment would wake me up. But otherwise I would even feel worse about myself and the training would go down (Line numbers 2629-2633).*

*Punishment in Training -- Coach's Bad Mood*



One athlete identified the coach's bad mood as a punishment. Although the athlete didn't particularly like it when the coach was in a bad mood he did feel there were times when the coach's bad mood impacted him in a positive manner.

*(NT8)you decide if he is correct, if he is correct, you get mad at yourself, you try harder yea sometimes you need it, you don't need someone to be positive all the time bc it doesn't always work that way. When people get down on you sometimes, you need it to kind of wake you up. You could be thinking that you've got something, and you are not thinking smart about it, if someone gets down on you, you realize you really don't have it (Line numbers 2802-2806).*

The athlete went to comment about how the coach's bad mood was an ineffective method of motivation if there wasn't athlete and coach congruence in assessment of effort.

*(NT8)well sometimes its good because it makes me try a little harder, but sometimes I don't think it is necessary at all...Sometimes when someone gets really mad, it makes you really mad and you try harder, you don't really care anymore, you don't worry about getting hurt or anything, you just go as hard as you can if he gets mad at me, it sometimes helps because I get mad at myself, then I try harder, but if I don't get mad at myself, then its just a waste of time.*

The athlete also went on to talk about the importance of the coach believing in the athlete.

*(NT7) the worst thing a coach can ever do is say to an athlete that they are not capable of doing something. Once you know that your coach doesn't think you are capable, when you realize he doesn't believe in you, you start to convince yourself of the same thing (Line numbers 2614-2616).*

#### *Punishment in Training -- Decreased Competition Time*

One athlete reported his coach using decreased competition opportunities as a punishment in training. Of all 12 of the athletes this was the only athlete who made the national team only once. This seems to be important to note as all 11 of the other athletes in competition were so good that even on days and in weeks they weren't performing well they were still usually better than the other athletes on their respective teams.

The athlete reported that 80% of the time if he wasn't performing up to his potential he was not placed in the lineup for competition. Collegiate gymnastics coaches often determine weekly competition lineups based on weekly training performance and only the top eight athletes per event make the lineup. The athlete saw the threat of decreased competition time as an ineffective motivational tool as it placed additional pressure on the athlete that the athlete believed made it difficult to perform. However once the athlete lost his spot in the lineup it seemed he began feeling a "nothing to lose" attitude which apparently lifted the imposed pressure and allowed him to perform up to potential once again.

*(NT12) Punishment pushes you to work harder, pressure impedes your ability to perform, ummm the threat of not competing made it harder for me, I'd say that made it really hard for me to perform...until I lost that spot, that actually happened to me and I lost the spot, so I wasn't competing for a couple weeks, and then something happened, and it was kind of that I had nothing else to lose, so I might as well give everything I've got. And I went crazy at that point, and started hitting routines. I'd say the reward based stuff helped a lot, but for me personally, when I lost that spot on the team and wasn't traveling as a senior, you know that lit that fire under my ass, and I went from hitting one routine a week to 11 routines a week (Line numbers 4577-4584).*

#### *Punishment in Training – Increased Workload, Bad Mood or Sitting Out for Broken Rules*

Four athletes made comment about their coach's punishment in response to broken team rules. Three of the athletes recalled their coach using punishment 100% of the time and the fourth athlete commented that 75% of the time that team rules were broken there was punishment. The most common example of broken team rules was not showing up for practice on time. Other examples of broken team rules were; not making grades, and general disrespect for the coach or other athletes on the team. Examples of punishments included things like the coach yelling at the athlete, extra running, sitting out or being sent home when athletes didn't follow team rules.

*(NT8) like one day we had an assembly, and i was like 10 minutes late, and he gets grouchy over that, it just sets him in a bad mood for the whole workout(Line numbers 2725-2726).*

*(NT6) Yes, one day I was late, and he was very upset, and I was never late for a workout again... to me that was punishment, because I admired him so I wanted to be worthy of his respect (Line numbers 2332-2333).*

*(NT1) Uh, if it was the first offense, it was just, you. Just run a mile, you know. You can't let bad things go unseen or unpunished. So it was nothing terrible but just run a mile after practice ...If there is 1 kid showing up late to practice every day, the other teammates are going to be pissed off. As a coach, you have to keep the balance, you know. If someone is showing up late to practice every day, you know he just rolled in like it's ok. You've got to show the team as well as the individual that won't stand. There has to be punishment because if everyone else follows the rules and one person isn't and there's no consequence, you are just going to have problems on the team (Line numbers 302-308).*

All four of the athletes felt that punishment in response to rules that were already defined was an effective and necessary part of training.

*(NT9) For me it hurt was because I was missing that opportunity, not being involved and it the self-confidence a little bit, it doesn't help short term, because I felt really down and I knew it was my fault, it was a hard lesson, but in the long term I think that really helped me but in the short term it hurt...it teaches you discipline and behavior, something I really needed as a kid, so at that moment he said, ok are you ready to come back? And I said, yeah I'm ready, and your focused again and you don't want to mess up (Line numbers 3384-3389).*

*(NT4) It affected my performance and how I behaved because I didn't want it to happen again so I worked hoarder, and followed the rules(Line numbers 1542-1543) .*

Additionally in each of the four athlete's opinions it was important for coaches to have pre-established team rules and consequences in place for athletes who didn't follow those rules. All four of the athletes said they would use punishment with athletes who broke team rules if they were coaching.

*Punishment in Training -- Revoked Financial Support*

One athlete talked about his coach pulling financial support in response to poor performance. The athlete said that it occurred only about 5% of the time and felt that it could have been more effective if it had been used more often. One of the chief concerns of the athlete was that the coach had too low of expectations and then did a poor job of following through with consequences. The athlete gives the following account of how it occurred:

*(NT10)In practice and certainly in competition if we didn't do well we didn't get the perks. We didn't get the nice dinners a lot of the times...I think there was a lot more talk about the punishment than there was actual follow through. So you know obviously that translated into it not meaning as much when there was just talk about it. All talk and no follow through typically ends up in not very effective, not very believable So I think that rendered the punishment pretty ineffective... It probably hurt my ability. I think if he would have pushed me harder I could have accomplished even more than I did. It sucks really to think of it that way but that's how I feel (Line numbers 3793-3800).*

#### *Punishment in Training -- Negative Talk (Screaming and Name Calling)*

Nine athletes reported their coaches' use of negative talk when they weren't performing well. Of the nine athletes, five said they felt the negative talk was effective while one of the athletes felt that it was effective only some of the time and one athlete felt the negative talk was ineffective. The four athletes who felt the coach's use of negative talk was effective each reported their coach only using negative talk as a punishment between 5%-25% of the time. The following are examples of the coach's use of negative talk whereas the coach used the punishment 15% of the time, 5% of the time and 25% of the time respectively.

*(NT3)Coach can lean on you, I mean he kind of looks at you and then turns away and shakes his head. Then he comes back and will let you know what he thinks and it can be hard to hear at times (Line numbers 1143-1146).*

*(NT6)The first time I experienced aversive because I chickened out in the middle of a handspring. He yelled, don't you ever do that again!!! And he never raised his voice like that again. When you hesitate, that is a chance of an injury. Every time he said go for it, I trusted him that he knew I could do it (Line numbers 2269-2274).*

*(NT5) Even things like calling you out on not doing the work if you're not doing the work. Even the extent sometimes of being called weak, or other words along those lines that kind of just break you down mentally but the coach usually knows what their doing that their investing in the long term success (Line numbers 2005-2008).*

The same three athletes later went on to talk about the positive effect the coach's negative talk had on them.

*(NT3) Cuz they're breaking you down for a reason... And you know for an athletic side it's when you get punished, because you don't want to be in that situation again, it makes you stronger to handle things. Like when you do get emotionally punished or physically punished, you are becoming stronger because you can handle more defeat or you can handle temporary defeat better in the future, maybe you'll know how to be resilient, bounce back in a competition things of that nature (Line numbers 2012-2016).*

*(NT6) I thought it was appropriate that day, but if he yelled everyday in the gym, I would become numb to that form of communication. We worked hard, but when anger came, it was so rare, that you knew he wanted to see some behavior change.. If the coach is going to use punishment he has got to have developed trust in the relationship. I have to know that their plan will work and that it makes sense. If they are going to punish me for lack of effort great but I don't think there is any way it works if it s used for lack of ability (Line numbers 2323-2328).*

*(NT5) If the athlete is constantly enduring punishment without ever getting the positive praise to balance that out—I believe that can be very harmful short term and long term because now that athlete is constantly having to deal with very negative words, negative actions by the coaches, and never really fully understanding the enjoyment of the process because there's never been any evidence to show that here's why I'm doing this... as long as there is positive as well yeah I think there has to be some of the punishments when they need a little push (Line numbers 2119-2125).*

NT11 reported his coach using negative talk 100% of the time he wasn't performing well and thought the punishment was ineffective. He gave the following example of his coach' negative talk:

*(NT11) Yeah, he calls me a baby all the time. I don't believe what he says, because I have tons of people telling me otherwise, and he does this to everybody, but I guess in a way you cant help to feel badly about yourself I usually just chop it up to, well, he's trying to motivate me, even though he is just being a jerk (Line numbers 4087-4090).*

NT11 later went on to describe why he felt the punishment was ineffective:

*(NT11) I think it def has a negative affect on me, it takes my focus off of things, if you can tell, now is one of the worse periods of mine and (coach's) relationship, we kind of go through phases. It just takes my focus off of what I am doing. Instead of focusing on my routine, I find myself talking to one of my teammates, like what is his problem (Line numbers 4132-4137).*

The athlete that felt negative talk as a punishment was effective only some of the time reported his coach using it 65% of the time he wasn't performing well. It seemed the key factor was whether or not the coach and athlete agreed on their assessment of effort being put forth by the athlete. If the athlete and coach both agreed that the athlete's effort was low then the negative talk seemed to be an effective punishment however if the athlete believed his effort level was already high he felt the punishment was ineffective and at counter-productive.

*(NT7) Its almost as if I'm showing him that this isn't what I like. So maybe I'm not doing well and if he is yelling at me, I don't want to try, because if he thinks it works, then he'll use it all the time. It's almost as if I don't want to make it (Line numbers 2872-2874).*

### **Punishment in Competition**

The different types of punishment exhibited by coaches during or after a poor performance reported by the participants were increased workload (2-NT2, NT5) and, most commonly, some form of a bad mood such as yelling, throwing things, and not speaking (6-NT7, NT1, NT9, NT10, NT4, NT11). See Table 5 for a summary.

TABLE 5: SUMMARY OF PUNISHMENT IN COMPETITION REPORTED BY THE ATHLETES

	Increased Workload	Bad Mood
NT2	X	
NT10		X
NT1		X
NT3		
NT7		X
NT11		X
NT5	X	
NT4		X
NT12		
NT9		X
NT6		
NT8		

*Punishment in Competition -- Increased Workload*

Two of the athletes (NT2, NT5) reported that their coaches would increase the workload of the athletes in practices following a poor performance in competition. NT2 reported that 80% of the time after a poor performance in competition, his coach would assign one to three extra routines per event. NT2 described this as beneficial to performance and self-confidence in the long run when the increase in routines during practice improved performance during the next meet.

*(NT2) Initially, I think my self confidence goes down along with a bunch of other guys on the team. But when you start to see the rewards from the consequences, your routines are getting a lot easier and you're hitting them more often, then your self confidence gets a push. And it might not be right away. It might be a week or two down the road, but it'll pay off (Line numbers 846-851).*

NT5 had a similar response to the increased workload after a poor performance in competition. While he expressed a negative reaction to this punishment initially (e.g., "It hurts.

It's humiliating, but it makes you feel like, you can do this"), he reported a positive affect on future performance of a specific component:

*(NT5) I rarely missed a ginger again...at the next competition, I vividly remember looking over the bar and making sure I caught the ginger (Line numbers 2066-2067).*

#### *Punishment in Competition -- Coach's Bad Mood*

Six of the athletes (NT7, NT1, NT9, NT10, NT4, NT11) reported that their coaches would exhibit some form of a bad mood, including yelling, throwing things, or not speaking to the athlete after a poor performance in competition. The athletes' descriptions include the following:

*(NT7) Yelling, to throwing things, to just like tantrums, not speaking to me. Just anger (Line number 2555).*

*(NT4) [When] we weren't performing the way we should, we usually got a pretty aggressive speech in the hallway or behind a curtain, which usually went along the lines of, "What do you train so hard for? To come out here and compete like crap?" And, "I'm embarrassed to be out there with you all" (Line numbers 1373-1376).*

*(NT11) It's definitely not motivational. It's more like, "Your career is going to be over if you don't hit this. Yes, that definitely feels like a level of punishment (Line numbers 4114-4116).*

NT7 commented that this form of punishment did not negatively affect his self-confidence because he knew that his coach trusted his capability. He also commented that his coach had already built up his self-confidence, so he was able to endure the punishment without negative consequences.

*(NT7) Even if he was in the worst mood ever, he never made me feel like I wasn't capable. So it never botched my self confidence. When he is pissed off, sometimes I would get pissed, too, but it wouldn't ruin my meet. And even though he was mad he would still be like, "Come on. Let's go. Get this set." I don't know that the punishment was helpful,*



*but he had already built my confidence previously, so I knew he knew I could do it (Line numbers 2575-2579).*

NT4 reported a similar effect of his coach's bad mood (i.e., yelling and negative talk) due to the previous development of trust between the coach and the athlete:

*(NT4) So when he yelled at me, I felt like he was yelling out of love, not because he was angry, but disappointed (Line numbers 1420-1421).*

### **Punishment-Summary**

As noted previously, very little research exists concerning the relationship between punishment and performance. Limited past research with young or novice athletes indicates that punishment is not as effective as reward because punishment produces performance anxiety, inhibition and lowered internal motivation. The findings on punishment from this study run parallel to the existing literature about the negative impact punishment can have on self-efficacy and performance.

*(NT12)When I was trying to avoid getting more routines to avoid the punishment, I don't know it was different, it felt like I was more disappointed in myself if I didn't hit the routine...it wasn't just me that was disappointed, I could see that the coaches were disappointed too. ...and I would crumble under the pressure that I was putting on myself yea maybe it was trying too hard or just puttin the pressure on myself, I wouldn't swing as freely or I wouldn't be loose when I was swinging, I'd tighten up and I'd be nervous up there (Line numbers 4499-4504).*

*(NT11)I think it def has a negative affect on me, it takes my focus off of things, It just takes my focus off of what I am doing. Instead of focusing on my routine...with the negative stuff, you can't just take that and move on from it one minute later... and if you are pissed off, you are not going to have a good practice (Line numbers 4132-4137).*

All twelve of the athletes commented that they believed their coaches should use punishment in certain situations. The following quotes seems to capture the finding of this study that punishment can be quite effective if it is used appropriately.

*(NT9) That right there alone was probably the biggest jump of my success I think, my confidence in competition, it was so easy, it grew instantly, just because I went through that low point, where I can't do that at all and it was impossible, and then I did it and it was like, if I can do it now, I can do it anywhere, easy... because even though I was scared in that moment, he made it clear to me that I could do it. I trusted him and he had laid such a strong foundation of support and positive, that when he did use the punishment, I still felt supported and strong I know that is what is going through his head, he wanted it for me, and he had that in his eyes that he knew I could do it, and I was like shit I've got to do it, I can do it in a way Line numbers 3335-3342).*

*(NT12) I'd say the reward based stuff helped a lot, but for me personally, when I lost that spot on the team and wasn't traveling as a senior, you know that lit that fire under my ass, and I went from hitting one routine a week to 11 routines a week (Line numbers 4581-4584).*

*(NT6) I thought it was appropriate that day, but if he yelled everyday in the gym, I would become numb to that form of communication. We worked hard, but when anger came, it was so rare, that you knew he wanted to see some behavior change.. If the coach is going to use punishment he has got to have developed trust in the relationship. I have to know that their plan will work and that it makes sense. If they are going to punish me for lack of effort great but I don't think there is any way it works if it is used for lack of ability (Line numbers 2323-2328).*

*(NT5) I was told by (coach) one time, "Don't leave here until you hit a pommel horse routine." And I was struggling you know, stuff was hurting and I'm sitting here wondering how in the world I'm going to hit a pommel horse routine. And he's kinda just standing there and uh, it this happened with Ohio State as well. You're pretty much at a pretty low point at that point. It's humiliating, the guys are watching, you don't feel good about your gymnastics, it's a rough day, and it's on that fifth try when you actually ending up do hitting the routine and the coach comes back and praises that moment that see, you know, after all that, you know, you come back and you hit a pommel horse routine that's what I wanted you to do in the first place, see you can do it when you are absolutely at you're worst (Line numbers 2139-2147).*

The categories identified as punishments by the athletes are listed as followed: Increased workload (NT3, NT9, NT12, NT11, NT5, NT10, NT2, NT8), bad mood (NT7), decreased competition time (NT12), yelling or sitting out based on broken team rules (NT1, NT4, NT9, NT6), revoked perks such as less money spent on travel and team dinners (NT10) and negative talk characterized by yelling and or name calling (NT1, NT10, NT3, NT11, NT6, NT5, NT9,

NT4, NT7). See Table 6 for an overall summary of the types of punishment reported by the athletes.

TABLE 6: OVERALL SUMMARY OF THE TYPES OF PUNISHMENT REPORTED BY THE ATHLETES

	Increased Workload	Bad Mood	Yelling / Sitting Out (Broken Team Rules)	Revoked Perks	Negative Talk
NT2	X			-	
NT10	X			X	X
NT1	-	-	X	-	X
NT3	X	-			X
NT7		X		-	X
NT11	X	-			X
NT5	X	-	-	-	X
NT4		-	X	-	X
NT12	X	-	-		-
NT9	X	-	X		X
NT6		-	X	-	X
NT8	X	-		-	

The findings on punishment reinforce the five conditions for effective reinforcement discussed earlier. These conditions seem to set the stage for a positive relationship between the coach and the athlete (coach believing in the athlete), trust that the punishment was actually going to help them become a better gymnast (athlete believes in the coach and his plan) and that the use of the punishment was in congruence with the athlete's belief that the athlete wasn't giving their best effort coupled with the need for honesty and follow through on the coach's part.

In each of the five conditions the frequency appeared in the punishment data at a frequency of no less than nine of the athletes commenting with an intensity level of moderate to extreme for each. Additionally all five conditions seem to be effective only if they are perceived to be in place all the time. It makes sense that if the coach uses honesty, believes in the athlete, or

follows through with punishment only part of the time, if the athlete doesn't believe in the coach or his plan all the time, or the coach and athlete don't always agree on effort being put forward by the athlete then the trusting relationship between athlete and coach suffers. This causes the punishment to become a less effective motivational resource. This is evidenced with comments from NT10 and NT11 below.

*(NT10) All talk and no follow through typically ends up in not very effective, not very believable So I think that rendered the punishment pretty ineffective... It probably hurt my ability. I think if he would have pushed me harder I could have accomplished even more than I did. It sucks really to think of it that way but that's how I feel Line numbers 3796-3800).*

*(NT11)I guess I have learned to not really care about what (coach) says. Even when it's positive I find myself not as interested in his words because of all the negative bullshit he pulls with me (Line numbers 4192-4193).*

All 12 of the athletes commented on the importance of their coach's belief in them in terms of increasing the effectiveness of punishment.

A key component that seems to be necessary for the utilization of punishment after a poor performance in competition is a trust between the athlete and coach. An athlete's knowledge that his coach's negative reaction stems from knowledge that the athlete is capable of a better performance seems to be essential.

This allows the coach's punishment to serve as motivation, rather than deteriorating the coach -- athlete relationship. Other athletes felt that a poor performance in competition served as a punishment in itself (NT1, NT9, and NT11), so this type of punishment did not benefit the athletes' performance, motivation, or self-confidence. The following quotes signify the importance of the coach believing in the athlete prior to using punishment:

*(NT9) I won't use any punishment without building them up first; I won't do it because I know it just won't work (Line numbers 3534-3535).*

*(NT4) So when he yelled at me, I felt like he was yelling out of love, not because he was angry, but disappointed (Line numbers 1420-1421).*

*(NT5) If the athlete is constantly enduring punishment without ever getting the positive praise to balance that out—I believe that can be very harmful short term and long term because now that athlete is constantly having to deal with very negative words, negative actions by the coaches, and never really fully understanding the enjoyment of the process because there's never been any evidence to show that here's why I'm doing this... as long as there is positive as well, yeah I think there has to be some of the punishments when they need a little push (Line numbers 2119-2125).*

*(NT7) Even if he was in the worst mood ever, he never made me feel like I wasn't capable. So it never botched my self confidence. When he is pissed off, sometimes I would get pissed, too, but it wouldn't ruin my meet. And even though he was mad he would still be like, "Come on. Let's go. Get this set." I don't know that the punishment was helpful, but he had already built my confidence previously, so I knew he knew I could do it (Line numbers 2575-2579).*

*(NT7) The worst thing a coach can ever do is say to an athlete that they are not capable of doing something. Once you know that your coach doesn't think you are capable, when you realize he doesn't believe in you, you start to convince yourself of the same thing (Line numbers 2614-2616).*

Two athletes felt their coach didn't believe in them and made comments spoke of how counter-productive the impact was.

*(NT11) Yeah, he calls me a baby all the time. I don't believe what he says, because I have tons of people telling me otherwise, and he does this to everybody, but I guess in a way you cant help to feel badly about yourself I usually just chop it up to, well, he's trying to motivate me, even though he is just being a jerk (Line numbers 4087-4090).*

*(NT10) 95% of the time coach had expectations that were too low I felt the expectations for the team weren't too low, but I felt that translated into expectations for myself being too low. If an athlete has a great deal of ability, and the coaches expectations aren't actually as high, it's just tough. I think you can see some regression in that athlete or they don't feel like they did what they could have or would have (Line numbers 3772-3776).*

Nine athletes identified an importance of trusting the coach and his training plan. If the athletes felt the coach's punishments were going to cause them to improve as a gymnast then they seemed to perceive them as much more effective. NT2 comments about his coach's use of punishment (increased work load) after previously talking about the trust he has in his former Olympic Gold Medalist coach:

*(NT2)Initially, I think my self confidence goes down along with a bunch of other guys on the team. But when you start to see the rewards from the consequences, your routines are getting a lot easier and you're hitting them more often, then your self confidence gets a push. And it might not be right away. It might be a week or two down the road, but it'll pay off. Punishment makes your, I think that the day after, he'll make your performance be not as good, as like your vaulting will go down, but at the same time you know you're getting better (Line numbers 846-851).*

NT3 illustrates the effectiveness and of the punishment as it is aligned with training harder and getting better.

*(NT3) If my coach is going to punish me, I am going to do what he says because I feel like I need it. A lot of time I already had it in my head that I am going to do more anyway, before my coach had a chance to. Very few times have I ever been discouraged. When I do start to feel discourage, I truly to think about what I have done in the sport and what do I want to do in the future. So I will start to train harder (Line numbers 1122-1126) .*

NT2 then goes on to discuss his thoughts on his coach being in a bad mood while using increased workload.

*(NT2)Its so much more effective when Um the extra workload when he's not trying to make you feel bad. I think it helps you more because you don't feel bad about yourself. Like, when he's giving you extra even though, when he's trying to make you feel bad—you're questioning yourself and saying, "Why does he want to make me feel bad?" and stuff like that. Where when he didn't do that, you're like, "Okay, he's just trying to make me a better gymnast or athlete" (Line numbers 925-929).*

Although NT2 believes in extra work as a punishment he does not feel the coach's bad mood is helpful or necessary so he begins to reject the effectiveness of that segment of the

punishment which unfortunately seems to lessen the effectiveness of the increased workload punishment.

*(NT2)if you're punishing them but you're still friendly about it and they know that it's not because you're pissed off at them, then they'll be more willing to do it and understand where you're coming from (Line numbers 954-956).*

When the athletes didn't trust the coach's training plan the punishments issued seemed much less effective.

*(NT11) I think it def has a negative affect on me, it takes my focus off of things, if you can tell...It just takes my focus off of what I am doing. Instead of focusing on my routine, I find myself talking to one of my teammates, like what is his problem (Line numbers 4132-4135).*

Eight athletes spoke about the need for assessment of effort congruence. Whereas athletes felt punishment was effective if they agreed with the coach that they were trying or performing at a lesser intensity than they were capable of.

*(NT7) Sometimes I would work harder and sometimes it would just piss me off. If I felt like I wasn't doing my best, it would help but If I was already busting my ass it would pretty much ruin the day... yeah on those days when I wasn't giving my all I would step up and that punishment would wake me up. But otherwise I would even feel worse about myself and the training would go down (Line numbers 2629-2633).*

*(NT8) You decide if he is correct, if he is correct, you get mad at yourself, you try harder yea sometimes you need it (Line numbers 2802-2803) .*

*(NT11) If someone really isn't putting their effort into it, then it would be appropriate...if the whole team was not trying and hung over, then maybe there would be a cardio punishment or a strength punishment I would only do it when I felt it was really deserved (Line numbers 4261-4263).*

*(NT3) Yeah, I think punishment can do one of 2 things. Either you receive punishment, and you know you did a bad job and you need to step it up for yourself and your team, or it is discouraging because you may feel like you are doing a good job, so you are discouraged because you feel like there is noting I can do well (Line numbers 1114-1117).*

All of the athletes identified honesty and follow through as important components of making punishment an effective motivator. One athlete (NT10) commented that his coach would threaten punishment, but would not consistently follow through with his threats. The athlete reported that this lack of consistency as follows:

*(NT10) I think there was a lot more talk about the punishment than there was actual follow-through. So you know obviously that translated into it not meaning as much when there was just talk about it. All talk and no follow through typically ends up in not very effective, not very believable so I think that rendered the punishment pretty ineffective... It probably hurt my ability. I think if he would have pushed me harder I could have accomplished even more than I did. It sucks really to think of it that way but that's how I feel (Line numbers 3795-3800).*

Several of the athletes commented that a poor performance during a meet served as a punishment in itself, so the coaches' punishments did little more than anger the athlete. NT1, NT9, and NT11 describe this as follows:

*(NT1) It always made us feel like shit afterwards. [After] the worst meet of my college career...[our coach] ripped into us for like 20 minutes, probably. Did that make me train harder the next week? Did that make me care more? Absolutely not. It made me feel more like shit after I already had a bad meet. I think it is counterproductive. I don't think it helps. I think if you perform poorly in a meet, it wasn't your desire to do shitty. I don't feel like punishment is warranted when you struggle with competition. It just doesn't help. If anything, it made me think less of my coach (Line numbers 280-285).*

*(NT9) I think the competition itself is punishment if you don't have a good meet. If you don't make the cut, or you don't make national team, that is punishment alone. I think at that point you just need support from the coach (Line numbers 3467-3469).*

*(NT11) [The negative talk] would distract me and piss me off. I would say nothing good came of it. I didn't feel good about myself, and I didn't want to work harder, and I didn't do any better either. Overall it's a joke. Really disappointing. I lose focus. I start to think about how pissed I am... I just don't think about what I need to be thinking about. So it definitely makes it harder to perform (Line numbers 4200-4204).*



The fact that all twelve athletes stated that they would use punishment if they were coaching suggests that all of the athletes believe punishment is an important and effective method of motivation within the competitive sports setting. It is also quite important to note that each of the athletes commented on the distinction between ineffective and effective uses of punishment. The athlete's identification of good and bad punishment punctuates a great need for coaches to realize that they should be using punishment but only if they understand what conditions make punishment effective rather than ineffective.

### **Summary**

In summarizing the research findings, it is important again to review that this study is primarily concerned with the perception athletes have on punishment and how it affects self-efficacy and performance. Perceptions of reward, in addition to, punishment were examined to create a more complete picture of the spectrum of reinforcement behaviors of the coaches of the 12 athletes interviewed.

All athletes commented on the positive effect their coach's use of rewards had on their training. Although the nine of the athletes claimed the rewards helped with self-efficacy, the athletes did seem to downplay the effect rewards had on their self-efficacy. Most of the athletes stated that their self-confidence (athletes chose to interchange self-confidence for self-efficacy) was really strong at the point of the interviews and that the coaching reinforcement behaviors (reward and punishment) effected it but not dramatically.

It appears the common finding in the existing literature emphasizing the importance of positive reinforcement within the athletic setting parallels this study's findings. This was most evident in the importance athletes placed on their coach believing in them. It appeared that

positive reinforcement combined with honesty (for example, the coach didn't reward them for poor performance) and congruence in assessment of effort (coach and athlete agreed that effort was high) helped create the conditions for the athlete to feel the coach genuinely believed in the athlete. The belief the coach had in the athlete seemed to become internalized by the athlete. Ten of the athletes (NT1, NT2, NT3, NT4, NT5, NT6, NT7, NT8, NT9, NT12) fully felt their coach believed in them and nine out of those athletes commented on having high self-efficacy (NT12 commented that at times his self-efficacy was marginal). Of the two athletes (NT10 and NT11) that questioned their coach's belief in them, one athlete commented that his self-efficacy was high (NT10) and one athlete struggled with self-efficacy (NT11).

Additionally it was noted that the athletes didn't feel much of a need for their coaches to use reinforcement (reward or punishment) during competition. The research also indicated that coaches agree with the lack of necessity of reinforcement behaviors during competition as the athlete responses indicated far less of the reinforcement behaviors being used by the coaches during competition as compared with training.

Concerning punishment, all 12 of the athletes believed punishment should be utilized by coaches in the sports setting and all 12 athletes felt punishment should be used *appropriately*. This suggests that athletes have the knowledge of how punishment is used inappropriately and appropriately (hence causing a need for future research to identify if athletes agree on what appropriate punishment is). Athletes in this study identified five conditions that allowed for the appropriate or effective use of punishment. The conditions the athletes in this study perceived as increasing the effectiveness of punishment were: honesty from the coach (honesty whether the athlete was doing well and not doing well) coach believes in the athlete (even when using

punishment it is important to do so in a manner that suggests the coach believes in the athlete), athlete must believe in the coach and his plan (athlete perceives the punishment will cause him to improve), congruence in assessment of effort (punishment was used when athlete and coach agreed the athlete's effort needs to improve) and follow through (coach follows through on stated consequences).

## CHAPTER 5

### DISCUSSION

Coaches may believe that punishment is an essential tool for controlling athlete motivation and performance, yet little information exists to direct coaches as how to use punishment effectively. The current study identifies the perceptions of elite male gymnasts of punishment and the effect on self-efficacy and performance. This qualitative study lays the groundwork for educating coaches on contexts that can make punishment, should they choose to use it, effective in improving performance while avoiding the negative effects on self-efficacy.

In an attempt to clarify the relationship between the use of reward and punishment as forms of motivation on athletes' self-efficacy and performance, this study examined athletes' perceptions of their coaches' behaviors and techniques through interviews. Trends are identified based on the use of rewards in training, rewards in competition, punishment in training, and punishment in competition. Specifically, this study examined the perceptions of elite-level athletes who have experienced high levels of success in their sport (i.e., gymnastics), and whether the same results would be found with less successful or less experienced athletes is not known.

As this was a qualitative, interview-based study, it is difficult to determine whether the coaches' techniques allowed the athletes to achieve such success, or whether these elite level athletes possess certain characteristics that offer them resiliency to negative coaching such that they propel their own success in spite of coaching techniques. While it is impossible to determine the exact direction of the relationship by the methods of the current study, it is likely that both the athletes' characteristics and their coaches' techniques facilitated their success.

The interview questions used in this study were designed to estimate the effects of the coaches' use of reward and punishment on the athlete's self-efficacy, motivation, and performance. External motivation (i.e., defined in this study as reward and punishment) is the vehicle by which coaches typically influence these factors in their athletes (e.g., Bandura, 1997, Bandura, 2001, Schunk, 1990). High self-efficacy allows individuals to persist longer on tasks and expend more effort on tasks (Schunk, 1990). The more athletes believe in their ability to accomplish high levels of performance, the more motivated they will be to work hard, and the greater chance of successful performance (e.g., Bandura, 2001). Overall, studies conducted on self-efficacy and performance using athletes have shown that self-efficacy is a predictor of performance (Feltz & Lirgg, 2001).

### **Findings on Reward and Punishment**

The external motivators discussed in this study are reward and punishment. A reward was defined as any stimulus, situation, or verbal statement that produces satisfaction for the athlete, and punishment was defined a stimulus with negative valence or a stimulus capable of inflicting pain or discomfort (Chaplan, 1985; Michael, 1975, 2005). The rewards identified by the participants were decreased workload, positive attention, experiential rewards, befriending the athlete, charts/competition games, monetary rewards, nicer travel, and employment benefits. The punishments implemented by coaches and identified by the participants were increased workload, bad mood, yelling/sitting out, revoked perks, and negative talk. Through the manipulation of the previously mentioned rewards and punishment, coaches have the ability to influence athletes' motivation, self-efficacy, and performance. It appears that utilizing punishment when the athlete perceives certain conditions (honesty from the coach, coach belief

in the athlete, athlete believes in the coach and coaching plan, congruence in assessment of effort between coach and athlete and follow through from the coach on promised consequences) can increase the athlete's perceptions as to the effectiveness of punishment on self-efficacy and performance. Research has shown that the inappropriate use of punishment can result in a decrease in self-efficacy, although it may produce a short-term change in behavior (e.g., Avila & Torrubia, 2005, Malott, 2005). This study allowed for an examination of any effective ways coaches applied punishment to avoid these negative results.

The theoretical framework behind this study stems from Bandura's (e.g., 1977) work on consequent determinants of behavior. Consequences extensively regulate behavior antecedently by creating expectations of future rewards or punishments. Within this framework, Bandura stresses the importance of individuals being able to correctly anticipate consequences. If consequences occur irregularly or unpredictably, an individual may experience defensiveness or may not modify his/her behavior. Bandura's work on outcome expectancy and efficacy expectation run parallel to the athletes' accounts of the effectiveness of their coaches' motivational techniques.

Outcome expectancy refers to a person's estimate that a given behavior will produce a certain consequence or outcome. Efficacy expectation refers to one's belief that he can successfully execute the behavior required to produce the outcome. The strength of this conviction will determine whether or not he will attempt to overcome a difficult situation. If he believes he will be able to handle the situation, he will behave affirmatively, but if he thinks he is unable to handle the situation, he will avoid it. The stronger one's efficacy expectation, the more active his efforts will be (Bandura, 1977). Several of the athletes in this study commented on the

importance of feeling that the coach knew he (the athlete) would be able to handle the situation and perform well. This knowledge seemed to instill a certain amount of efficacy belief in the athletes and allowed for punishments to serve as motivation.

This study confirms Bandura's postulation that humans aren't purely biologically driven entities moving from one place to another solely based on the rewards and punishments propelling them. Rather, individuals decide what routes to take based on their perceptions of the effectiveness of the outcomes and personal efficacy. Bandura identified the choice of perception as the agentic principle and this study confirms the parallel in athletics. Athletes aren't merely organisms responding to the rewards and punishments their coaches are using but instead are constantly perceiving and deciding which rewards and punishments are helpful.

It appears there is strong correlation between the athlete's perception of effectiveness of reward or punishment and the subsequent motivation. If the athlete feels the reward or punishment is helpful then he will experience increased motivation as a result, whereas if the athlete feels the reward or punishment isn't helpful then there will be little positive result and the reward or punishment could be counterproductive.

Bandura (1977) also pointed to the importance of skill achievement for building an individual's self-efficacy. The sample for this study consisted of athletes who have had extraordinary levels of skill achievement, as they have reached elite-level status in their sport, but several athletes commented that the punishment of increased workload would provide them with opportunities to succeed at a previously failed task. When the athletes felt that increased workload would not lead to successful performance, however, this seemed to instill hostility toward the coach.

Bandura (1977) also discusses the importance of consistency between an individual's self-evaluation of whether a behavior should be rewarded or punished, and the external reward or punishment received. External reinforcement has the greatest influence when it is consistent with a person's self-produced reinforcement. Harter's (1978) idea of optimal challenge is also applicable to this consistency between an athlete's self-evaluation and a coach's evaluation. How individuals perceive their achievement or behavior influences how they think about it.

If achievement is seen as optimal to the individual, then the achievement will have a positive effect on self-efficacy development. The positive effect of achievement occurs if the task difficulty matches individuals' abilities. If individuals see the task as too easy or too hard, then achievement does not effect evaluations of self or self-efficacy, and the individual will dismiss the success or failure. However, if the task difficulty and an individual's ability match (optimal challenge) the results affect the developing self-efficacy.

Several of the athletes mentioned here they would feel hostility when a coach used punishment after a failed performance, while the athlete felt he had expended as much effort as possible. Further, several of the athletes commented that certain rewards did not have much of an effect on their self-confidence because they had such high expectations for their own behavior that they did not need the external reinforcement. This lack of need for rewards could arguably have resulted from the coach previously instilling very high levels of self-efficacy in the athlete through the use of rewards. This trend seems consistent with Allen and Howe's (1998) finding that after a good performance, higher ability, frequent praise and information were correlated with greater satisfaction with the team and coach; and after an error, frequent encouragement and corrective information were correlated with lower satisfaction with the team and coach. The



Allen and Howe study shows that encouragement and instruction were related to perceptions of lower competence in athletes. This, again, points to the importance of an appropriate balance in the use of rewards and reinforcement. The increased use of rewards does not always have a positive effect, and this study begins to address how this balance can be established.

Bandura's theoretical framework also discusses the need for consequences to evoke moderate levels of arousal in order to have maximum effectiveness. If punishment entices high emotional arousal in an athlete, his performance will often decline. Too little arousal, however, will have no effect on behavior. It is essential, therefore, to determine the optimal unit of punishment necessary to positively affect motivation and behavior. Several of the athletes here commented that instilling a punishment after a poor performance in a competition was debilitating, rather than motivational, as the athletes already had negative feelings about their performance. Punishing something for which the athletes were already "punishing themselves" might entice debilitating high levels of emotional arousal.

Bandura argues that punishment (and reward) should encourage or discourage behaviors that individuals would otherwise disregard. As involvement in a skill or behavior increases, these external consequences should be replaced with the athlete's internal motivation. When this internal motivation is lacking, however, external motivators (both reward and punishment) should be utilized (Bandura, 1977). Meyer (1992) further examined this as he argued that praise can lead to an inference that the one giving the praise perceives the other's ability as low, while criticism can result in an inference that one's ability is perceived as high. The effects of praise and criticism are mediated by one's processing of the situation. Giving praise for an easy task can lead the recipient to think that he is inferred to have low ability. Meyer stated that

“criticism...may function as a cue for inferring that the actor's ability is estimated to be high” (1992).

The current study attempted to lay the groundwork for future studies to develop specific criteria that can be applied to coaching. The majority of negative side effects associated with punishment often result in a decrease in self-efficacy. An individual's perception of self is lowered based on the fear of failure promoted from the use of punishment (Cooley, 1902/1956; Harter, 1978; Scanlan, 1982; Smith, 1993). Observational findings here indicated that when coaches use a balance of both positive reinforcement and punishment, there is prior knowledge of expectations associated with rewards and punishment, and the punishment is administered in a non-threatening way there appears to be a positive effect on performance without the typically negative effects on self-efficacy development (Gonzalez-Vallejo & Bonham, 2007). A summary of the prevalent trends identified in this study is provided below and specific findings on reward versus punishment are discussed.

#### *Athlete Perceived Rewards*

While it has become somewhat common knowledge among coaches that the use of rewards is an effective coaching strategy, this study has helped to pinpoint which categories of rewards are most effective. Further, and arguably more importantly, a discussion of the effective use of reinforcement (reward and punishment) among the coaches of these elite-level athletes provides an understanding of how punishment can be used effectively. A solid balance of reward-based motivation seems to be integral for the effective use of punishment to improve performance and motivation without damaging self-confidence and the coach-athlete relationship.

All twelve of the athletes interviewed for this study commented on the effectiveness of rewards during training. While the positive effect of reward based motivation is no surprise based on years of research reported in the literature, specific types of rewards were identified to be especially effective in these athletes. Further, reward-based coaching methods that were deemed ineffective by the athletes were identified.

Decreased workload was identified by some of the athletes as a type of reward used by their coaches that was well-received by the athletes, but it remains unclear whether this type of reward helps to increase ability in the athletes in the long term. While the athletes reported an increase in motivation as a result of the prospect of a decreased workload, it was also reported that this had little effect on the athlete's long-term overall ability. Decreased workload as a reward-based form of motivation, however, may be effective for facilitating short-term motivation.

Positive attention, characterized as praise and/or extra coaching by the coach, as a reward used in both training and competition was most commonly identified by the athletes (i.e., ten out of twelve). Positive attention seemed to be the most effective reward identified by the athletes in increasing motivation, self-confidence, and ability. This positive attention seemed to directly influence the self-confidence of some of the athletes whose coaches provided it more than 50% of the time during training, and they perceived this to indirectly increase one's ability to perform. An important insight was provided by one athlete (NT11), whose coach only provided positive attention about 5% of the time after a successful performance in practice.

While the athlete reported that praise did make it easier for him to perform well, this type of reward did not have a significant effect on his performance, as he had a difficult time taking

the praise seriously from such a negative coach. This seems to suggest that positive attention and praise has a more long-term effect on performance when coaches employ this type of reward more frequently (i.e., at least 50% of the time after an athlete perceived success).

Another type of reward identified by two of the athletes was experiential rewards, characterized by experiences such as lunches or dinners with the coach, attendance of outside sporting events, etc. These types of rewards seemed to be used sparingly by the coaches (between 5-10% of the time) but seemed to be effective for facilitating short-term motivation.

A type of reward identified by the athletes that may prove to be an integral component for the effective use of rewards and punishments is the coach befriending the athlete. This was characterized as the coach believing in the athlete, listening and empathizing with the athlete, interacting honestly with the athlete, and being in a good mood during training and competition. One athlete (NT1) described the coach's use of this as "invaluable."

While befriending the athlete may not have a direct effect on the development of the athletes' self-confidence and ability, the indirect effects on the effective uses of punishment will be discussed further in the punishment section of this chapter. One athlete (NT7) commented that his coach's excited mood during a successful competition seemed to show that his coach knew he was capable of success. Eleven of the twelve athletes also identified the importance of their coaches' honesty. The coach being honest with the athlete, even about a poor performance, seemed to facilitate the trust between the athlete and coach. This seemed to be an integral component to the success of this athlete, and seems to be consistent with the importance of a positive relationship between the coach and athlete. The factors that affect the coach-athlete relationship seem to be important prerequisites for the effective application of punishment.

Competition games used during training were also identified by the athletes as types of rewards utilized by their coaches. Although only four (NT4, NT5, NT6 and NT11) of the athletes commented that their coaches used competition games, all four suggested that the competition games were of tremendous value for them. These games seemed to facilitate athlete motivation by making the training more enjoyable and providing the athletes with short-term goals during training.

Five athletes viewed the credibility of their coaches as a reward, in itself, which may have facilitated the effectiveness of the coaches' methods. The respect for and credentials associated with these athletes' coaches may have played a large role in the effectiveness of the use of rewards and punishment.

Other less common rewards reported by the athletes were monetary rewards (one athlete-NT5), nicer travel arrangements (one athlete-NT10), and employment opportunities (one athlete-NT10), high 5's (NT2). These were described by the athletes as effective in the short-term for increasing motivation, but were not reported by more than one athlete.

While rewards were identified by the athletes as effective means of motivating, increasing self-confidence, and improving performance, a *lack* of reward from a coach was identified as having a negative effect on the athletes. During competition, two athletes commented that a lack of positive feedback from the coach after an athlete perceived positive performance resulted in confusion and a decrease in self-confidence. Two of the athletes (NT4 and NT5) reported self-doubt as a result of a successful performance without praise from the coach.

*Athlete Perceived Punishment*

Increased workload was a common form of punishment after both poor performance in training and in competition described by many of the athletes. All but two of the athletes agreed that increased workload was an effective form of punishment, but only if a positive relationship was in place between the athlete and coach. Further, it seemed from the results that the athlete needed to have trust in the coach's knowledge that the increased workload would help the athlete's performance. An important insight about the use of increased workload after a poor performance, however, was that the athlete needs to feel that he was not performing to the best of his ability, that is, the punishment was perceived as justified.

Several of the athletes commented that this type of punishment applied when he already felt that he was giving maximum effort was discouraging and ineffective for motivating the athlete. The athletes felt this punishment was effective when the athlete was not performing his best, and this punishment served as a "wake-up call" for the athlete. In addition, the importance of a positive, honest, and trusting relationship between the athlete and coach is displayed in this use of this form of punishment, as the athletes needed to trust that the coach knew that the athlete *could* actually perform better. When this foundational relationship between coach and athlete was absent, the punishment was deemed ineffective, and detrimental to the athletes' performance.

Further benefit seems to come from the application of increased workload when the athletes believe the increased training will result in an increase in ability and performance. This, again, addresses the importance of the athlete trusting that his coach knows that the increase in workload will positively influence performance. A few of the athletes commented that an

increase in self-confidence would occur as a result of the improvement in performance, but the increased workload, itself, did not increase self-confidence.

Common forms of punishment discussed by the athletes included forms of a bad mood in the coach, including yelling, throwing things, negative talks, or not speaking to the athlete during a poor performance in training or competition. An important distinction was raised between athletes who felt that this was effective versus those athletes who felt that this was detrimental. Several of the athletes commented that this form of punishment did serve as motivational, if their coaches had already built a strong foundation of trust with the athletes. Further, for this punishment to be effective, the athletes still needed to feel that their coaches knew they were capable of better.

After a poor performance during a competition, however, several of the athletes commented that a coach's bad mood was not helpful, as the athletes were already down on themselves for their poor performance. In these situations, a coach's punishments did little more than anger the athletes. A key component for the effective use of punishment expressed from these interviews seems to be the athlete's knowledge that the coach believes in his capabilities. Further, the athletes again commented on the importance of agreement between the athlete and coach on the assessment of the athlete's effort. If the athlete did not feel that he was deserving of punishment, it was ineffective.

Another important trend identified by the athletes was the effectiveness of using punishment for broken team rules (e.g., late to practice, missed practice, low grades, disrespect to coach or teammates). It was reported that team rules needed to be pre-established in order for the punishment to be effective. The athletes reported that this form of punishment helped to establish

discipline. That is, they were supportive of coaches using this form of punishment with team members who violated team rules.

### **Summary**

The results of the study confirmed much of the existing literature that identified reward-based motivation as an effective resource for coaches. This study specifically confirms the findings that positive feedback and encouragement results in increased self-efficacy (Allen & Howe 1998; Amorose & Horn 2000; Anshel & Hoosima; Bandura 1969, 1977, 1997). In addition the study confirms that punishment can have a positive effect on performance if used appropriately (Malott, 2005; Michael, 1993; Perone, 2003; Ratner and Herbst, 2005 Seifried, 2010).

The results of the interviews seemed to reveal five important conditions that increase the effectiveness of athlete perceived reward and punishment: honesty from the coach, the coach believing in the athlete, the athlete believing in the coach and the coaching plan, congruence in assessment of effort between the coach and athlete and follow through from the coach on promised consequences (reward and punishment). The first of these is honesty from the coach about when the athlete is doing well and not doing well. Honesty from the coach will allow for a trust to develop between the athlete and coach. This trust is crucial for the athlete to know that punishment is applied because the coach knows the athlete is capable of more.

Second, the athlete needs to know that the coach believes in his capabilities. If the athlete perceives the coach has faith in the athlete then it is likely that the athlete internalizes the coach's belief as self-efficacy. The use of rewards seemed to be integral in helping to establish the conditions that allow for punishment to be used productively.



Third, the athlete must trust in the coach and coaching plan. If the athlete believes the coach knows what he is doing then the athlete is much more likely to view the coach's motivational strategies as effective. The athlete's belief in the coach and the coaching plan seemed to translate into increased motivation and ability. It appeared important to the athletes that if they were being punished by the coach that punishment was more effective if the athlete believed the coach knew what he was doing. The punishment then would have a positive impact on the athlete's ability to perform in the future. For example, a coach yelling at the athlete after a poor performance was not perceived as effective as the coach assigning the athlete extra work after a poor performance because the athlete wasn't able to see the benefit in being yelled at. In contrast, doing extra work on a problematic skill could help the athlete achieve a higher level of performance mastery in the future.

The fourth condition is that the coach and athlete must have congruence in the assessment of the athlete's effort. An athlete being punished for an amount of effort that he deems to be appropriate will likely result in anger or resentment from the athlete.

The fifth condition that athletes found important was that the coach showed follow through on consequences (reward and punishment).. This contributes to the trust between the coach and athlete, and allows for the athletes to have consistent knowledge of the consequences associated with their actions.

### **Research Considerations**

Historically speaking, the field of Sport Psychology has relied on the scientific approach of positivism to guide the majority of the research conducted in the field. The major tenet of positivism suggests that there are systematic, orderly and predictable laws that govern the world.

According to Brustad (2005) positivism has focused more on identifying rules that govern individuals and discouraged science from looking at the individual's experience of the world.

Positivism was grounded in the belief that there exist immutable laws in the natural and social worlds that are unaffected by one's perspective and that can best be understood through the reliance on objective scientific processes. In other words, this tradition adhered to the notion that there exists a singular concrete reality that reasonable people using logical means can understand (p. 23).

Brustad went on to state that "positivists considered all reliance on subjective or unobservable processes, including emotional experiences, to be outside the realm of good science" (p. 23).

Due to the criticism that positivism only supported what was measurable and observable, postpositivism emerged as a respected form of knowledge development. Postpositivism supports the idea that not all human behavior falls within the boundaries of a singular concrete reality. As a result of this, a greater need for qualitative research that focused more on individual experience and perception developed. Although there are critiques of both positivism and postpositivism, positivism remains the primary research methodology for knowledge development (Brustad 2005).

With the tension between positivism and postpositivism as the backdrop of knowledge development, three major perspectives within the field of sport psychology have evolved (Feltz & Kontos 2005). The first perspective views sport psychology as a sub discipline within the broader field of psychology where the major tenets of psychology have been applied to the athletic setting. Considering the heavy emphasis on positivism, it only makes sense that much of

the research conducted and much of what we accept as truth about human behavior has been laid on the foundation of research done on animal behavior. Additionally, much of what we know about sport psychology has been studied in contrived environments rather than within an authentic athletic or sport environment (Gergen, 1991; Martens 1987).

The second major perspective views sport psychology as a sub discipline of sport and exercise science. Exercise and sport science draws on the fields of psychology, physiology, kinesiology, anatomy and sociology for knowledge development. This perspective often runs parallel with social psychology in that the emphasis is on the group or team rather than the individual. According to Feltz and Kontos (2005) “these divergent views pose different questions, which define the content of study in terms of topics, methods and theoretical orientations” (p. 4).

The third perspective views sport psychology and social psychology as an interactive relationship where an interface exists within the relationship (Brawley & Martin 1995; Feltz and Kontos 2005). The benefit of the interface is quite beneficial to the field of sport psychology in terms of research methodologies, knowledge paradigms and theory. However much of the structural knowledge base within sport psychology has been borrowed from social psychology which certainly causes concerns about the foundational strength of sport psychology as a whole. Brawley and Martin state, “Exchanging goods with defects may require future recall of these faulty products” (p. 471).

As a result of concerns about knowledge development and foundation strength, two alternate approaches of study are developing within the field of sport psychology. The hermeneutic / interpretive approach which is aligned closely with constructivism, emphasizes

naturalistic and ethnographic approaches to understanding the experience within the sport landscape. Brustad (2005) contended that the hermeneutic / interpretive approach is “grounded in the belief that human behavior is fundamentally related to individual perceptions of the meaning inherent within social contexts” (p. 32). The goal of this approach is to understand the individual’s experience within the sport specific context based on the reality constructed.

The critical / feminist approach emphasizes the nature of power and social relations. Brustad (2005) expressed that this approach looks to unmask the accepted truths concerning “why certain forms of knowledge have come to be valued above other forms and whom this knowledge serves” (p. 33). The critical / feminist approach believes that the relationship between the social context and the individual is what actually deems truth and reality. Critical / feminist approach researchers argue that reality isn’t neutral but rather socially constructed. How an individual views things is based on the much larger context in which we function and the reality is based on society based judgments.

Feminists argue that much of the research conducted hasn’t taken into account the social reality that historically women (and certain members of racial, religious and socioeconomic groups) haven’t been given the same opportunities for sport participation. It is important to note how deeply the mainstream acceptance of certain socio-historical perspectives impacts the entire field of sport. The critical / feminist approach highlights a dramatic need to understand how the valuation of certain races, gender, religion and socioeconomic status has impacted the research, administration and participation of sport in society.

The current study follows a postpositivism approach to knowledge development by highlighting the athlete perception. The study’s main goal was to identify how an athlete

perceived his coach's use of punishment to effect how he felt about himself and his ability to perform. The study viewed sport psychology as an interface with social psychology and specifically chose to use social cognitive theory as the structural foundation of the study. Throughout the study there were times that deductive reasoning was used (i.e. certain truths were assumed; coaches impact the athlete's self efficacy and the athlete's ability to perform, athlete's have the ability through perception to chose how they react to the coach's behavior, coaches use punishment to motivate, punishment typically has a negative impact on self efficacy and subsequently performance), as was inductive reasoning (athlete responses identified five conditions that could increase the effectiveness of punishment in the elite level sport setting).

A strength of this study lies in the fact that it was an applied study with a theoretical foundation. The study focused solely on *athlete perceptions* based on their real life experience with sport. The setting being studied was authentic and the athletes served as the experts in terms of what was effective or not. The athlete perceptions were integrated with social cognitive theory in an attempt to confirm the existing knowledge base and also to add to it.

Coaches using punishment to motivate athletes to improve can garner information from this study that will be beneficial to both themselves and the athletes with whom they work. Conditions were identified in this study that increased the athlete's ability to perform while controlling for the negative effect punishment typically has on the athlete's self-efficacy. The coach benefits by respecting the five conditions identified in this study because the athlete performs at a higher level and the athlete benefits because he feels better about himself along the way.

This study is that it might be viewed by coaches as an open invitation to use punishment to motivate. The study's intention was to better inform coaches about the use of punishment in that if a coach is going to use punishment he / she would be more able to use it to the athlete's benefit in certain circumstances. It was assumed that coaches who use punishment are using it for the sole purpose of increasing an athlete's ability to perform and not the self-serving motive of "getting back at" the under-performing athlete.

It is also of concern that non-elite level coaches may look at this study as permission to use punishment more often with their athletes. It is important to realize this is an introductory study of elite level athletes and there is no information in this study on what is appropriate or effective with the younger or less advanced athlete. The athletes participating in this study were all older athletes (between 18 and 28 years old) and have all experienced very high levels of competition success. These factors may allow the elite level coach to use punishment far differently coaches of other athletes.

In addition this study did nothing to address the critical / feminist concerns that there are previously accepted truths that do not take into account the unequal opportunities based on race, gender and socioeconomic status pervasive in society and sport. Thus it furthers the void that exists in critical research attempting to uncover the realities for all those participating in sport.

#### Future Directions for Research

The current study examined perceived effectiveness of motivational strategies employed by coaches currently coaching elite level male gymnasts. One of the most immediate needs in the field of sport psychology is the integration of applied and theoretical work. In addition it is important to note that the majority of research in the field of sport psychology is focused on

performance enhancement and elite level competitors rather than focusing on the larger population of athletes participating in sport that are not elite level performers (Hoberman, 1992; Tinning, 1997; Whitson & MacIntosh, 1990).

In light of the critical / feminist approach, it is painfully obvious there exists a need for future research looking into how the societal influences and inequalities effect not only punishment but sport participation as a whole. The lack of research using this approach results in a void in theoretical foundations for future research and thus attempts at future theory building could further deepen the divide between the “have’s and have not’s”. Researchers conducting studies without the theoretical foundation of knowing the effect that societal influences have on human behavior could be creating flaws in all future theory building attempts. For example studies such as this one could be merely reflecting the experiences of those privileged enough to make it to the elite level of sport whereas results could be generalized as the experience of all athletes. Too, it could reflect the image of coaches as “tough men” controlling all aspects of male athletes participation in sport.

Conducting research that combines both practical and theoretical knowledge and emphasizes not only the individual but also the societal influences of individuals across gender, race and socioeconomic status will require larger scale studies and studies of varying methodological stances and techniques. Conducting future research in both the hermeneutic and critical approaches could create a much more accurate and revealing picture of the actual experience within sport.

There is a distinct need for future research on the perception that female athletes have concerning punishment and the effect on self-efficacy and performance. It would be important to

conduct this research with elite level performers as well as with male and female non-elite level athletes. This may serve to identify the effect that success in competition has on an athlete's perceptions of what is effective in terms of punishment. It would make sense that athletes being rewarded in competition view punishment as more effective than athletes who are not experiencing high levels of competition success. If this assumption is true, the implications for using punishment with non-elite level athletes might be far different than those described here.

It could also prove fruitful to conduct research illuminating the effect that punishment has on younger athletes (both male and female). Theoretically speaking, younger athletes may be at a much different place developmentally in terms of their ability to deal with punishment. From a practical standpoint it also seems necessary to track the effect punishment has on the development of self-efficacy and the effect punishment has on performance in younger athletes. For this to be accomplished there would need to be a combination of qualitative research focusing on both athlete and coach perceptions of what is effective and quantitative research finding measurable results that punishment has on self-efficacy and performance.

Additionally there is a distinct need to examine how athletes of traditionally characterized team sports (baseball, football, basketball, soccer, hockey, lacrosse) perceive punishment and the effect it has on self-efficacy and performance. In particular it could be of value to identify the effect of interactive performance (during sports like basketball, the performance of one player more directly effects the performance of the other players on the court) has on the athlete perceptions of the effective use of punishment.



## Conclusion

In sport, coaches use both reward and punishment to motivate athletes to train harder and over time to increase their ability. There has been much research into the importance of using rewards; however, very little research exists to educate coaches on the best practices of using punishment assuming that coaches by tradition regularly resort to punishment. As a result, many coaches use punishment without knowing how punishment affects their athletes. This research project was an introductory study looking at how elite level male gymnasts perceived the effects of punishment of self-efficacy and performance.

The study revealed three very interesting findings concerning how elite level athletes view coaching reinforcement behaviors. First, the research confirmed much of the existing literature concerning the positive effect that rewards serve. All 12 of the athletes interviewed stated that they believed reward based motivation was helpful and necessary in sport.

The second finding this research revealed was that elite level athletes believe punishment is an effective and necessary part of the athletic experience. All 12 of the athletes interviewed commented that punishment is something that at times and if used appropriately is an important part of the learning process. To further the point all 12 athletes stated that they themselves would use punishment as a motivational resource if they were coaches.

The third finding of interest was an identification of the conditions that the elite level athletes believed contributed to the increased effectiveness of punishment. The five conditions the elite athlete believed contribute to the effectual use of punishment are: the coach using honesty with the athlete (being honest in terms of when the athlete is doing well or not doing well), the coach believing in the athlete, the athlete believing in the coach / coaching plan (does

the athlete believe the punishment will have a positive effect on the athlete's ability to perform in the future), congruence in assessment of effort (coach and athlete agree on level of effort the athlete is putting forth), and follow through on stated consequences (reward and punishment).

The relevance of this study's findings are additionally related to opening the door for the future research into the effect punishment has on athletes and their ability to perform. This study set aside the assumption that use of punishment is always improper and harmful to athletes. It also acknowledged the reality that coaches use punishment. Due to the infancy of this research, future studies across perspectives on knowledge development foundations as well as across approaches is warranted. There is a great need for better understanding how coaches can better use punishment to positively affect the goals that coaches have as well as creating a more positive experience in sport for athletes of all ages, race, gender socio-economic status and skill level.

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**APPENDIX A**



**Department of Education**

8001 Natural Bridge Road  
St. Louis, Missouri 63121-4499  
Telephone: 314-516-xxxx  
Fax: 314-516-xxxx  
E-mail: xxxxx@umsl.edu

**Informed Consent for Participation in Research Activities**

Athlete perceptions of the effects of punishment on athletic performance

Participant \_\_\_\_\_ HSC Approval Number \_\_\_\_\_

Principal Investigator: Jason Selk, M.Ed, LPC, NCC PI's Phone Number (314) 365-2119

**Why am I being asked to participate?**

You are invited to participate in a research study about the effects of punishment on athletic performance conducted by Jason Selk; the Graduate School at the University of Missouri-St. You have been asked to participate in the research because you are considered an elite athlete in the sport of gymnastics, having been selected for the USA Men's Gymnastics National Team, and may be eligible to participate. We ask that you read this form and ask any questions you may have before agreeing to be in the research. Your participation in this research is voluntary. Your decision whether to participate will not affect your current or future relations with the University. If you decide to participate, you are free to withdraw at any time without affecting that relationship.

**What is the purpose of this research?**

The purpose of this research is to begin to identify coaching methods, specifically the use of punishment, that affect self-efficacy and performance.

**What procedures are involved?**

If you agree to participate in this research, you can expect:

- The primary investigator will provide a brief introduction and summary of the research. You will then participate in a one-on-one interview with the researcher, during which the researcher will ask questions regarding the motivational strategies used by your coaches (e.g., punishment, reward, etc.), and how these strategies affect your self-efficacy, motivation, and performance. The interview will be recorded using a digital voice recorder. Once the interview is complete, a copy of the transcribed interview will be sent to you so that you may ensure its accuracy.

- Participation will take about one hour. The interview will take place at the location of your choosing or in the primary investigator's office.

Approximately 12 participants may be involved in this research at the University of Missouri-St. Louis.

**What are the potential risks and discomforts?**

There are certain risks and discomforts that may be associated with this research. They include:

Potential boredom, loss of time, and potential loss of anonymity. To minimize the loss of anonymity, the digital voice recordings will be destroyed at the completion of the study, and you will not be recording your name or other identifying information.

**Are there benefits to taking part in the research?**

While your participation will not provide you with any direct benefits, your participation may benefit others by enhancing the knowledge and literature about effective coaching methods.

**Will I be told about new information that may affect my decision to participate?**

During the course of the study, you will be informed of any significant new findings (either good or bad), such as changes in the risks or benefits resulting from participation in the research, or new alternatives to participation, that might cause you to change your mind about continuing in the study. If new information is provided to you, your consent to continue to participate in this study will be re-obtained.

**What about privacy and confidentiality?**

Protected Health Information (PHI) is any health information through which you can be identified. PHI is protected by federal law under HIPAA (the Health Insurance Portability and Accountability Act).

This study will not involve PHI.

The only people who will know that you are a research subject are members of the research team. No information about you, or provided by you during the research, will be disclosed to others without your written permission, except:

1. if necessary to protect your rights or welfare (for example, if you are injured and need emergency care or when the University of Missouri-St Louis Institutional Review Board monitors the research or consent process); or
2. if required by law.

When the results of the research are published or discussed in conferences, no information will be included that would reveal your identity. If photographs, videos or audiotape recordings of you will be used for educational purposes, your identity will be protected or disguised. Any information that is

obtained in connection with this study, and that can be identified with you, will remain confidential and will be disclosed only with your permission or as required by law.

Once the interview is complete a copy of the transcribed text will be sent to you within three weeks of the interview for you to check. If needed a follow up meeting will be arranged for clarification and confirmation of the transcribed text of the interview. Upon meeting for the second time you will be asked to clarify and confirm the transcribed text's accuracy. All edits will be noted, adjusted and re-sent to you for accuracy confirmation prior to being used in the research project. At the completion of the study, the digital sound files will be destroyed.

All information pertaining to the research study will be stored either in a password protected computer or in the primary investigator's locked office to prevent access by unauthorized personnel.

Before the start of the interview, you will be asked to sign this consent document. At any time you can choose not to participate with no loss or penalty to you.

The research team will use and share your information until [possible end points](#). At that point, the investigator will remove the identifiers from your information, making it impossible to link you to the study.

Do you already have contact restrictions in place with UM-SL?       Yes    No

(Example: no calls at home, no messages left for you, etc.)

Please specify any contact restrictions you want to request for this study only.

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**Will I be paid for my participation in this research?**

There will be no payment or gifts offered for participation in this research.

**Can I withdraw or be removed from the study?**

You can choose whether to be in this study. If you volunteer to be in this study, you may withdraw at any time without consequences of any kind. You also may refuse to answer any questions you do not want to answer and still remain in the study. The investigator may withdraw you from this research if circumstances arise which warrant doing so. If you decide to end your participation in the study, please complete the withdrawal letter found at <http://www.umsl.edu/services/ora/assets/WithdrawalLetter.doc>, or you may request that the Investigator send you a copy of the letter.

**Who should I contact if I have questions?**

The researcher conducting this study is Jason Selk. You may ask any questions you have now. If you have questions later, you may contact the researcher at (314)365-2119.

**What are my rights as a research subject?**

If you have any questions about your rights as a research subject, you may call the Chairperson of the Institutional Review Board at (314) 516-5897.

**What if I am a UMSL student?**

You may choose not to participate, or to stop your participation in this research, at any time. This decision will not affect your class standing or grades at UM-SL. The investigator also may end your participation in the research. If this happens, your class standing will not be affected. You will not be offered or receive any special consideration if you participate in this research.

**What if I am a UMSL employee?**

Your participation in this research is, in no way, part of your university duties, and your refusal to participate will not in any way affect your employment with the university or the benefits, privileges, or opportunities associated with your employment at UM-SL. You will not be offered or receive any special consideration if you participate in this research.

**Remember:** Your participation in this research is voluntary. Your decision whether to participate will not affect your current or future relations with the University. If you decide to participate, you are free to withdraw at any time without affecting that relationship.

You will be given a copy of this form for your information and to keep for your records.

I have read the above statement and have been able to express my concerns, to which the investigator has responded satisfactorily. I believe I understand the purpose of the study, as well as the potential benefits and risks that are involved. I authorize the use of my PHI and give my permission to participate in the research described above.

**All signature dates must match.** Use signatures as appropriate.

\_\_\_\_\_  
Participant's Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Participant's Printed Name

\_\_\_\_\_  
Parent or Guardian's Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Parent or Guardian's Printed Name

\_\_\_\_\_  
Witness' Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Witness' Printed Name

\_\_\_\_\_  
Researcher's Signature

\_\_\_\_\_  
Date

(See guidelines on [Who May Obtain Consent](#))

The Notice of Privacy Practices (a separate document) describes the procedures used by UM-SL to protect your information. If you have not already received the Notice of Privacy Practices, the research team will make one available to you.

\_\_\_\_\_ I have been offered a copy of the UM-SL Notice of Privacy Practices.

*Initials*

Concept Coding

MOTIVATION AS CREDIBILITY (ZACK)

J: Okay, so, today's date is February 2<sup>nd</sup> and the subject is Zack Kabazan from the University of Iowa, Zach, thanks so much. Let's start, we're going to begin we're going to talk about Demitri here. First question I have is a very general question about motivation. Tell me about the motivation Demitri uses—what works and what doesn't work and why if you would.

Z: The motivation first can mean, gold medal Olympic gymnast, is a reason for us to listen to him more because he knows what he's talking about. And we know if we don't do something the way we were taught to do it by him, he'll be a bit upset and he'll make you do it and do it over again until you do it right, so.

PUNISHMENT

INCREASED WORKLOAD-ROUTINES (ZACK)

Z: That's about it, I mean, if we don't perform like we should at a meet, we'll end up with more routines than we did the week before.

J: So it sounds like what Demitri does is based on your performance whether it's in practice or in meets, if you don't perform well, what happens is you have to do to more work. Is that correct?

REWARD

DECREASED WORKLOAD (ZACK)

J: Does he use rewards with you in practices at all? Let's just kinda focus on practice for this question. Does he use rewards with you in practice?

Z: Um, he does but it's more like your practice will be more relaxed of a practice as a reward. It's not like back in club where like if you did something really good you'd get a little prize or something. It's more joking and relaxed and you'll get to just chill and quickly do your stuff and get of there.

J: Okay, so doing well causes you to have shorter practices?

Z: Um, not necessarily shorter, but easier than. Instead of doing like ten dismounts on the pommel horse after you do a routine, you'll do your two routines and then move onto your next event and have like five minute period where you just relax and get ready for your next event.

REWARD

COACH HAPPINESS-FRIENDLY TALK (ZACK)

J: Okay, and when you say that Demitri is more relaxed, I understand you mean about, sounds like again the idea is if you do well, you don't have to do as much. Um, but you also talked about him being more relaxed. How do you know that he's more relaxed? Do you hear it in the way that he talks to you? Is he nicer, is he more positive with you? What are some of the things that happen when you're actually performing well in practices in terms of how you know he's more relaxed?

Z: Um, he'll like when we're just like chalking up or getting ready to get a routine, when he's more relaxed he'll be standing there talking to you about like rock 'n roll, dance and what's playing in the gym and just questions about the American culture. He'll talk to you like he's your friend instead of your coach.

PUNISHMENT

COACH DISCIPLINE-FRUSTRATION (ZACK)

J: And compare that if you're not doing well. What's the difference, like let's say you're not performing well in practice. How would that be different in terms of how he talks to you?

Z: In terms of how he acts, first he'll give you more correction on how to do things. And he won't talk as much, you'll be able to see it on his face if he's frustrated. And he'll just if let's say you take five turns and the first couple turns are like giant on the ring, you do bent on giant on the rings (?), and he'll walk away to talk to Alex um in Russian, and like you can tell when they're upset they'll be talking in Russian just to each other.

#### REWARD

#### COACH HAPPINES-HIGH 2'S 3'S 4'S 5'S (ZACK)

J: Okay. Um, let's let's now talk about competition. If you do well in competition, are there any rewards? Does Demitri present you with any type of reward-based motivation in competition if you do well?

Z: um, yes he'll be excited and like if I'm at the competition I know first at like Windy Cindy at our first home meet he was like :way to go" and give you like, he'll do high five is the best, like saying high five with five fingers up. But if you do a mediocre routine it'll be a high three or a high two or something like that.

J: Okay, so he'll actually raise two fingers kind of like a high five and you just hit his two fingers or what?

Z: Yeah.

J: Okay. And so that's something that he does in competitions. And does it feel like reward to you?

Z: Yeah. Cuz like we'll have um Diego one of the seniors he'll come off of the floor and get like a high four. And then I'll go to my floor and land all of my passages, which hits um it's kind of difficult for me because I'm not, I don't have the stamina, but he'll give me a high five instead of a high four because he knows it's better for me. It's an improvement.

#### PUNISHMENT

#### INCREASED WORKLOAD (ZACK)

J: Okay. Any other rewards you can think of that Demitri uses whether it be in practices and/or competitions?

(6:58)

Z: Um, I think that's about it because he can't really give us any real reward.

J: There's no um, you know how kind of how at St. Louis Gym Center there used to be like charts on the back of the wall, those types of games and so forth? There's none of that going on?

Z: Ahhh, no. He'll use some charts when we're doing like, um, like a week before the competition, we'll go two of the routines on three events on Monday, and two routines on the other three on Tuesday, but he'll have like his clipboard and he'll be marking and um, saying the same thing as the high five thing but just write down the number and the chart.

J: Okay, does that feel like a reward when he's doing that? Or not so much?

Z: Um not so much until after he will actually explain what we have to do the next day. So like if you completely bombed a routine you have to at least one or two more routines on that even the next day. But if you do a good enough routine where you're just working like one skill on that event, the next day then that's our reward, just doing that one skill for 10-15 minutes and then moving on.

J: Instead of doing um higher work loads of either that or any skill and/or routines?

Z: Yeah.

J: Okay. And when does that kind of, you say that um, in training in practices he charts that stuff and then am I hearing at the end of practice then he discusses what your scores were, what your high five, high four, high threes were?

Z: Um usually we'll get to look at the charts like right after practice and he wanting to talk with like Colin and Alex about how the whole team did. And he'll also just explain, he'll talk to us in person about what we have to do the next day.

(9:18)

J: Okay. But that's at the end of practice, correct?

Z: Yes.

REWARD  
DECREASED WORKLOAD (ZACK)

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(9:18)

J: Okay. But that's at the end of practice, correct?

Z: Yes.

REWARD P  
RELAXED (ZACK)

J: And so throughout practice really what you get for reward is again if it's just that more relaxed feel, and a lot of that is just basically he's talking to you, he doesn't have the frustration so it seems, some of those types of things, right?

Z: Yep.

J: Okay, how often you know, I know that's he's only using these rewards when you're doing well. But if you're doing well, do you always experience those rewards or is it a certain percentage of time. Like in practice, if you're doing well, will he 100% of the time be more relaxed? Or not quite one hundred percent, where would we be?

Z: Um, it's usually all of one hundred percent of the time he'll try and be more relaxed around the certain gymnasts that are doing well. But let's say our whole group is on pommel horse and half of us are doing well, like me and one of the guys are hitting the routine but two other guys aren't, then he'll be a wee bit more relaxed with everyone, but you can still tell he's a bit frustrated, does that make sense?

J: Mhhhm.

Z: It's kind of hard to explain in words.

J: No, it's making sense to me—I'm following you. It's like basically if you do well in practice, one hundred percent of the time he's going to reward you by being more relaxed and less workload.

REWARD C  
HIGH 2'S 3'S 4'S 5'S (ZACK)

J: Now in competition if you're doing well, will you one hundred of the time get the high gives, high fours, high threes—will you get that?

Z: Um, not a hundred percent of the time because he's usually the one taking down the scores and making sure the start values are correct.

J: Right.

Z: Most of the time you'll get a handshake or a high five.

J: How often is that? Ballpark me. If it's not a hundred percent, then what is it?

Z: Um, almost after every event. It's like, usually on the floor you won't get it or on um, rings.

J: How come those two events, do you know?

Z: Well floor um, most of the guys in his group are on the floor line-up. So he's constantly moving the mat and going to stand in the corner where we do our big passes in to make sure we don't go flying off. Then rings he's just

always talking again with, we have most of our guys on the rings line-up too. He's talking to us making sure we have to hold our strength moves for three seconds instead of just two.

(12:30)

J: Okay so, in in competitions if it's not on those two events, is it one hundred percent on the other events?

Z: Yes.

J: So let's say that that's 4/6 events, could we say in competition when you do well, could we say that he rewards you 66% of the time with some kind of high five, four, or three something like that?

Z: Yeah.

J: Alright, let me ask you this. How low does he go? You said he does high five, four, three. Does he do high two high one?

Z: He's gone down to a high two before, but not a high one.

J: Okay, so if you do anything less than a two, I just want to try and follow this in my head, would that be or be compared to a missed routine then? If it's anything less than a high two you've missed the routine?

Z: Yeah, and usually a high two is about, it's close to a missed routine.

J: But not quite?

Z: Every once in awhile you'll see the high two, but very rarely.

J: Because that's on the border of a missed routine?

Z: Yes. A high three would be a good routine but you still have quite a few problems.

REWARD

COACH REWARD-MOTIVATION-RELAXED, RESTED, MORE WILLING  
AND HAPPY (ZACK)

J: Okay, so let me ask you this, how do you think Demitri's use of rewards effects your performance?

Z: Yes, I think let's see, when he's more relaxed and giving out these high fours and high fives it feels like, I feel more rested, I'm more willing to work out and happy to be there. But I'm not getting any high fives and he's constantly giving me corrections and saying "okay, you've gotta do five dismounts on rings, ten on pommel horse, ten on T bars, that um, a lot of jumps on the trampoline, then it's like I'm more anxious and I'm just wanted to get everything done before I can go do my homework and stuff like that.

REWARD

COACH-POSITIVE TEAM (ZACK)

J: What about in meets? Do you feel like you perform better when he's using the positive, the reward stuff?

Z: Yeah, I do. Of course I do. Yeah, because when he gives those rewards, at the same time all the guys on the team are being a lot louder to you and you that you've done a good job and you get a high give or a high three.

(15:43)

J: And so his positive reward effects the rest of the team. They kind of follow his lead?

Z: Yeah, and it gets them pumped up too.

J: Okay so that positive energy helps you to perform?

Z: Yeah.

#### REWARD

##### INCREASED HAPPY-INCREASED SC (ZACK)

J: Okay, um, hold on a sec. Here's another question: how do you think, or do you think reward-based behavior from Demitri effects your self confidence?

Z: How?

J: Yeah, do you think it does? The reward-based motivation effects your self confidence at all, either in practice or competition|?

Z: Yes, it effects both. Because if I know that I'm getting the rewards, I know I'm doing well so I'm kind of happier and I know that I can start doing new things and putting those into my routine so that I can be one of the top guys on the team and competitors in the NCAA.

J: Okay and so what does that do, like, um do you feel like that self confidence effects your performance?

Z: Yeah, because no matter what or how you get your self confidence, as long as your confident in yourself, and usually when you're confident your happy, and so if you're happy when you're doing stuff, anything, homework or a routine for gymnastics, you're gonna be doing better because it's fun.

#### PUNISHMENT P

##### EXTRA WORK, CONDITIONING, TRAINING (ZACK)

J: Okay, alright good. That's good on reward. Let's shift over punishment, okay. Do you feel like Demitri uses punishment with you in training?

(17:40)

Z: Uh, yeah.

J: Tell me about it.

Z: Um, let's see, punishment, first it's extra dismounts and extra routines, but then usually it would be we'll definitely do conditioning at the end of practice.

J: So that's punishment based? So if you're doing well you don't do conditioning?

Z: Um, kind of. It's like, no matter what you will have some conditioning to do, but if you're kind of being punished it will be a few more exercises and at the same time he'll keep a closer eye on you. And if you're doing it a slight little bit wrong, he'll correct you. And you'll have less time do it also.

J: Okay, so give me, How much more strength will you get if you have a bad practice? And I know it's hard to say that, but just try and ballpark me. Will he give you an extra ten percent more, and extra fifty percent more? Will it

be completely double the normal strength would be? If you're just having a normal bad practice how much extra strength?

Z: Um, I guess percentage wise, it would be ten to fifteen percent of like ? or other exercises which will usually target like that you're having a bad rings practice. It'll target your shoulders to get your shoulders stronger so that you can do rings. Or if you're doing floor mat then you're gonna have more leg strength.

J: Okay, so it's an additional ten to fifteen percent on the things you would already be doing plus these extra exercises.

Z: Yes.

PUNISHMENT C  
INCREASED ROUTINES, INCREASED EXPECTATIONS FOR QUALITY  
(ZACK)

J: Okay um, what about competition? If you do poorly in competition does he punish you?

Z: Not at the competition, but when we get back from the competition. He'll like, let's see, for this weekend for example was right after the competition we had our little huddle and he came over and asked all us as a team if we were doing enough routines in practice. And the minute you hear that come out of his mouth you know "oh no, that's going to be a lot more routines in practice and they'll be harder to hit your routines." And then as soon as we get back he'll usually start on a Monday and we will have more routines, more dismounts, and it will be harder to hit the routine to and harder to complete the dismounts because he's keeping a closer eye on you.

J: Okay so it's that's twofold there. It's not only you have to do more, but you have to do them better.

Z; Yeah.

J: Okay, how many more—ballpark me. Like if you have a good meet how many routines would you typically do the next, compared to if you have a bad meet, how many routines would you typically do?

Z: On a good meet you'll do end up doing like one routine on every event. And then a bad meet it's anywhere from two to three usually, usually two but you'll have like but maybe five minutes, if that in between to rest up and start your next routine. So, yeah, it's a lot quicker.

J: Okay, and I'm guessing that that time difference is connected to what you kind of talked about with the relaxed attitude before. It's like he's giving you more to do, but wanted you to get it done in the same amount of time. So you have less time in between whether it be strength sets or routines or extra dismounts or what not.

Z: Yeah.

J: Okay, okay. Um, any other types of punishment? IT sounds like what really what he does with punishment its really increasing workloads in terms of strength and skill-specific training. Anything else for consequences that jumps out at you that Demitri uses?

Z: Um, not really. That's about it.

J: Okay, again, the question, how often does he use punishment if you're having a practice? Is it one hundred percent of the time things will get more, he'll be less relaxed, you'll have more work to do, you'll have less time or the same amount of time to get it done?

Z: Um, it's about seventy percent of the time.

J: Okay, tell me about that.

RELATIONSHIP WITH COACH  
COMMUNICATION (ZACK)

Z: It's like depends on um he can also tell when, he knows when you're worn out from the day before. They know when we have classes all day, so like, I have Tuesdays I have classes until 5:30 at night and my only break is at practice. So on Wednesday he'll know that if I'm a bit tired it was because I was at class all day. And after class I was also doing homework and assignments.

J: So Demetri uses...I guess he's somewhat compassionate. That even if you're not performing thirty percent of the time, he'll try to be understanding and not hit you with punishment.

Z: Yeah, and like you communicate with him.

J: So you'd have to say to him.

Z: Yeah, you'd have to go up to him at the beginning of practice after our warm-up and um and go up and say, "Demi, I'm really tired today because I had class all day," or something like that. And he usually does understand. As long as you're let him know at the beginning of practice, he'll have no problem to just when he sees you getting tired, just let ya take a break for like five minutes. But that also depends where you rank in the team. How much of a contributor you are.

PUNISHMENT C  
NEGATIVE PERFORMANCE, EXTRA WORKLOAD, INCREASED RESULTS  
NEXT MEET (ZACK)

J: Okay, okay. That sounds good. Now tell me about, how do you think the punishment effects your performance in training?

Z: Punishment makes your, I think that the day after, he'll make your performance be not as good, as like your vaulting will go down, but at the same time you know you're getting better. Kind of.

(25:26)

J: Tell me about that. You think you're actual performance goes down, but it almost sounds like your self confidence goes up?

Z: Um, not self confidence going up, but like you know that you have to stick it through, because if you just give up then you're not getting stronger and you're not gonna um, you're not gonna perform better the next week or at the next competition.

J: Okay. Tell me then how do you feel like punishment effects your performance in competition? And it sounds like he doesn't necessarily punish you in competition. So I don't know, let's just see what your initial response to this is. Do you think punishment effects your performance in competition?

Z: Um, it sometimes it'll like enhance our performance, but at the same time I think it can have a negative result on our performance too.

J: Okay, go ahead.

Z: I know after our first meet we had a week where it was doing a lot of intense ?, we were constantly doing routines and stuff like that. But then when we had our competition on the weekend, we did a lot better. And we won the

competition. So I think it enhances it. But if we were to do the punishment for more than a week in a row it would probably have a negative showing at the competition.

J: How come? What do you think the key is there? Just the duration?

(27:52)

Z: Yeah. Because I know like we were really tired but we had like we would have three really high days in a row and then we would have weight training and then the Friday before the competition was just an hour and a half practice. So if we didn't have that short practice on a Friday, we'd be too tired to do our stuff at the competition.

PUNISHMENT

SC DECREASED INITIALLY, BUT THEN INCREASED WITH IMPROVED RESULTS FROM EXTRA WORK  
(ZACK)

J: Gotcha. Okay. Tell me about, do you think punishment impacts your self confidence?

Z: Initially, I think my self confidence goes down along with a bunch of other guys on the team. But when you start to see the rewards from the consequences, your routines are getting a lot easier and you're hitting them more often, then your self confidence gets a push. And it might not be right away. It might be a week or two down the road, but it'll pay off.

J: So you see this increased workload consequence as initially impacting self confidence poorly but because of the nature of the consequence being extra routines, extra work, it then starts to impact self confidence because you get better?

Z: Yes.

AS A COACH

REWARD

EARLY RELEASE (ZACK)

J: Okay, but you have in the passed? These questions are now going to be more focused on, if you were going to coach, knowing what you know as an athlete, you know, especially focused on motivation, reward, and punishment, let's talk about if you were a coach, would you use reward-based motivation with your athletes?

(30:03)

Z: I would, yeah.

J: Why, what types?

Z: Um, probably kind of the same thing as, like, if you're doing a really good job in practice on your routines, then it will be an easier practice and there wouldn't be as much strength at the end. So, like, if I was coaching it would pretty much seem as though you can come in, and if you can get your stuff done quick, then you can get out earlier type of thing. As long as you can do your stuff I have no problem with you getting out early.

J: Okay, and Demitri, what he does is basically you have a set amount of stuff you're gonna need to do each day, and if you do well you would do less, or that amount I guess I should say, and if you don't do well, then you have to do more than that. Is that how it works?

Z: Yes. As long as you do a fair amount of stuff properly and to his standards, then nothing is added onto that.

AS A COACH

PUNISHMENT  
INCREASED WORKLOAD (ZACK)

J: Okay. And then let's talk about punishment. Would you punish your athletes if you were the coach?

Z: Uh, yeah. Um, it all depends too. Because if, if they're not having a good day, yeah, the first day that happens I'm not really going to punish you. But if practice continues to be that bad, then there's going to be more punishment or there's more strength or more routines and they like are combined.

J: So again, pretty much following what Demitri does. You try to be compassionate, but if the poor performance becomes consistent, you feel like it's necessary to punish the athletes with extra work, extra workloads.

Z: Because it's not just to make them feel bad and wanna work harder—it will always make them better at the same time.

J: Do you think Demitri uses the punishment with you, his goal is to make you feel bad?

Z: Mmmm, it depends on the day, really. And how we did at the meet, so...

J: I'm wondering too, it sounds like somedays then he might be using punishment with you, but not necessarily be trying to make you feel bad?

Z: Yeah.

J: How do you know the difference? How do you know the days he's trying to make you feel bad, versus the days he's just trying to give you the work needed to make improvements?

PUNISHMENT  
INCREASED WORKLOAD WITH POSITIVE ATTITUDE

J: How do you know the difference? How do you know the days he's trying to make you feel bad, versus the days he's just trying to give you the work needed to make improvements?

(33:17)

Z: The days when he's kind of seems like he's trying to make us feel bad, um, it seems like he'll just give you something to do and he won't talk to you. He'll be like "Okay, you've got this stuff, so you do it," type of thing. But he'll be there to help you but if it's, if he's not trying to make you feel bad, he'll be joking around with you. Like if you, like an experience with me, he told me to do just so many double pikes off the trampoline where it's, he said, "Just go to the trampoline and do as many double pikes off where you land in or stick it as you can." But he'll be joking around and be saying how it's happening and how it's working and stuff like that.

J: I see. And what do you think is more effective? The extra work load when he's trying to make you feel bad, or the extra work load when he's not trying to make you feel bad?

Z: Um the extra workload when he's not trying to make you feel bad. I think it helps you more because you don't feel bad about yourself. Like, when he's giving you extra even though, when he's trying to make you feel bad—you're questioning yourself and saying, "Why does he want to make me feel bad?" and stuff like that. Where when he didn't do that, you're like, "Okay, he's just trying to make me a better gymnast or athlete."

J: I want to again, I want to be clear, the way you separate the two, it feels a little bit like, you know he might be giving you an extra workload, but if he's nice to you while he's giving you the extra workload and if he's nice to you while you finish your extra workload, it feels like he's not trying to make you feel bad. If he's not nice to you

and gives you the same extra workload, it feels like he's trying to make you feel bad and that doesn't work as well. Is that right? The nice or not? Does that capture it, or is there more to it than that?

Z: I, I think it captures it. 'Cuz, yeah, that pretty much sums it up. But like, if he's, like not communicating with us—he's having a bad day or has had a bad day before he comes into coach, then he'll let us know right at the beginning of practice too. So we know if he is being a jerk to us, it's not necessarily our fault. So.

(36:29)

J: Okay. Well that makes sense. I think that's a really important piece there. And you feel like as a coach, using punishment when you, let me just ask it this way, as a coach, what do you think would be more effective with your own athletes? Punishing without making them feel bad, or punishing and making them feel bad?

Z: Punishing without making them feel bad.

J: Is the most effective way to get them to perform?

Z: Yeah. Because it's pretty much the same thing as, yeah, if you're punishing them but you're still friendly about it and they know that it's not because you're pissed off at them, then they'll be more willing to do it and understand where you're coming from. But there's no reason for you to be upset at your athletes for no reason and you're giving them these insane amounts of push-ups, handstands, push-ups, whatever, then they're going to be upsetting you and nothing is going to happen and you're going to get no positive out of it.

J: Okay. That's really good stuff. Okay buddy, that's all the questions I had. Do you have any for me?

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SEAN TOWNSEND

POSITIVE REINFORCEMENT  
FRIEND, SUPPORTER (SEAN T)

J: Okay, so most of this is going to pertain to him. Does your coach use positive reinforcement with you in training? So in practice, does he use positive reinforcement?

S: Yes.

J: Tell me about it.

S: I mean, as far as right now, I'm kind of doing my own thing right now. He's kind of an observer and scheduler. If something's not going right, he'll come over and tell me, but he'll never yell at me, he'd never do anything like that. He's pretty much like a friend, a friend coach. He pretty much puts the schedule there, and I do it, you know? If I have questions, I ask him about it. But as far as reinforcement, he supports me in everything I do.

POSITIVE REINFORCEMENT  
PRESENT, ATTENTIVE, 7.5 OUT OF 10 POSITIVE WITH BEING PRESENT  
(SEAN T)

J: Now tell me about that, "supports." How do you know he's supportive?

(1:37)



S: Because he's there. He's coaching me.

J: Okay so he's present?

S: Yes, he's present.

J: You take a turn in practice. The turn's good. What happens?

S: He'll say that was awesome, or he'll say that was really good. And if it's not good, he'll tell me the corrections.

J: Okay, so do you feel like—that sounds like praise. You do something well, he gives you praise. I'd say that's definitely a form of positive reinforcement. Does that happen very often in training?

S: Yes. I mean he's pretty, I don't know..for him to get pretty excited it has to be a competition. Training he's pretty neutral. He's calm and you know he's business basically. And um.

J: Okay. So you take a turn, you take ten turns and all ten turns you have really hot turns. SO think now, I want reality, not what it's supposed to be—you take ten hot turns, how many of those ten turns does he give you praise?

S: Praise is what to you?

J: Ummm, I'm thinking in my head, "Am I supposed to answer this, or do I need you to answer it." I think I better kick it over to you. You tell me, what is praise to you?

S: Praise just means that, for Kevin, it means that you're going in the right direction as far as what you just did in training. It's good, but you, we're looking for perfection here in this sport. If something's really good, like perfect, he'd be like, "Good, you know that was it. That was perfect."

J: Okay, so ten turns, let's say they're hot but not perfect. Of those ten turns, how many of those, how often would you get, 'Good.' Just, in addition to, how much will you get that initial good, of 'Okay, Sean, you did a good job,' it doesn't have to be the word 'Good,' but, gives you a little bit of a pat on the back. Out of ten.

S: Uhhhh, and he's watching every turn?

J: Mhmmm.

S: That's a good question. Seven or eight, I guess pretty high.

J: Okay. Same scenario. You get the good of those same ten, how many is there also a focus on a correction or what you need to get better or improve next time?

(4:28)

S: If I do ten really good ones?

J: Yep.

S: About seven or eight.

J: Okay, so it sounds like one of the ways he gives you feedback is, you do something well he'll give you, he doesn't go overboard, but he will let you know that was good and this is what we need to improve on. That's very common to Kevin.

S: Yes.

J: Does that feel positive to you?

S: Of course.

#### HONESTY WITHOUT ATTITUDE (SEAN T)

J: What about competition? Does he use positive reinforcement in competition?

S: Yes, pretty much the same. I mean, if, he doesn't beat around the bush. If something went wrong, he'll tell ya. He'll say, "You know, that wasn't good." Like yesterday, he goes, "You know, you look little more sloppy today." But he doesn't say it anyway like, "You looked like crap today."

J: How does he walk that fine line?

(5:30)

S: I'm at the age where I've noticed that beforehand sometimes. And I go, "I just felt heavy today." And he'll go, "Yeah, you looked a little sloppier today." And I go, "Yeah, I know that."

#### POSITIVE REINFORCEMENT

#### LET'S MOVE ON AFTER MISTAKE (SEAN T)

J: And that was after the competition? What about during the competition? So, what event did you start on?

S: Rings.

J: Did you hit it?

S: No, I had a little mistake.

J: Okay, so what does he say when you, what does he say after a miss? Typically, not necessarily yesterday. If you don't do well during the competition, in between events?

S: He'd pretty much say, "Alright, you know, let's focus on the next event." Like one of those things—like kind of put it behind me.

J: Okay. Do you feel like that's helpful? Is that a helpful way to do it?

S: Ummm...

J: What do you feel like what would be more helpful: you miss rings and he says, "put it behind you, focus on vault," or, "that wasn't very good?"

S: I don't think that would work for me.

J: Okay, the second one wouldn't work for you?

S: Yes.

J: So the second one is better?

S: Yes. Like, he knows, what he says, basically, “You know you made a mistake, but you need to move on to the next event and do better. You need to make up some ground.”

#### RELATIONSHIP WITH COACH (SEAN T)

J: Okay. So in competition if things are going well, tell me about the feedback. Praise, positive reinforcement.

(7:23)

S: I mean, he’s pretty quiet with me. If something goes good, he’s like, “Nice,” you know, or he’ll shake my hand, but he knows right away that I’m thinking about the next event.

J: Does he handle you differently than other athletes?

S: He more just sits back and watches me more I guess.

J: Why do you think that is?

S: We both kind of have helped each other to get to our points in our careers, I think. And so, now that we’ve both accomplished more what we’ve ever wanted, you know, we kind of like I said, we’re like friends. I know when I’ve done something wrong—he knows when I’ve done something wrong. You know.

J: SO there’s a level of, with you, because you’ve been together so long, there’s less word communication?

S: In competition?

J: Yeah.

S: During competition he’s always been like that. He never really said that much. I mean after the competition, I mean, you know, then we’d talk about it.

#### POSITIVE REINFORCEMENT

#### GOALS, WALL CHARTS, PRIZES (SEAN T)

J: Alright. Okay. Can you give me other types of positive reinforcement? Are there other things that go on in the gym? Rewards, any positive motivational strategies that are used in training or competition that you can think of?

S: Occasionally he’ll do the, he’ll give a prize out or a point system, something like a chart. I heard Raj saying that. You know that’s definitely motivating—to have something to shoot for a goal besides just training to get better, you know to have something on the wall helps out a lot.

J: What’s helpful about that?

(9:31)

S: I guess it’s competitive you know. All the guys see it, we all see it, and we’re like, “I’m gonna win that,” “No, I’m gonna win that.”

J: So it’s a social evaluation piece?

S: Yeah.

J: So you’re publicly being evaluated with your peers. You’re in direct competition with your teammates.

S: Yeah, but in a positive way.

J: How? How do you get that?

S: We just see who wants to step it up, and who wants it more.

J: How does Kevin keep is positive? Could it be negative?

S: If somebody doesn't want to do it, or if somebody doesn't care, then yeah I'm sure for that person. You know I think that at this level, we have to be on the same board. If something like that comes up, you want to be involved in it—if that makes sense.

J: Tell me more.

S: Well we only have seven guys on our team, and sometimes they'll actually spilt us up. You know, three guys there, three guys here. So that way, you know, it's even better that way I think. Because us three are competing against those three, and it's like a fun little competition.

J: So for you, it feels more positive, more enjoyable if you're forming a team—doing those charts with a team, but both are, both feel positive, and both impact you in a positive way motivationally?

S: Yeah. It makes you snap into reality if you don't do good. It makes you see where you're at. Everybody needs that in not only gymnastics but at sport. You know sometimes you think you're doing well but then whenever the actual results come in you're like, "oh man, I did that bad." I think it's kind of good to see that.

J: And the chart helps with that because it gives you those social comparisons. Right there in front of you, right there on the wall. What if, would it work if Kevin just had a chart for you? If you didn't have the other six guys there and he just put a chart on the wall, would it work?

S: Like a game, a personal game for myself?

J: Does he make this a game? Does he make the chart a game? It sounds like you guys will do some competition type stuff—our team against your team.

S: Yes.

J: When it's just individual stuff, is it a game, is it "let's see who's going to win this thing?" Or is it, "let's just see how people are?"

S: I think it's a game.

J: How? What are the rules?

#### POSITIVE REINFORCEMENT CHARTS-COMPETITION GAME (TEAM AND INDIVIDUAL (SEAN T)

S: Ahhh, okay, like we had one a few weeks ago. He put everyone's name on the board and then, and then you, you get a gold if you get like 9/10 or less in a routine deduction. You get like 8 points for that. And then silver if you get 1-1.7 point off deduction, and bronze and so on and so many points. So of course you're going for that least amount of deductions and the team with the most points for the individual.

J: And does he then calculate at the end to determine a winner?

S: Yes.

J: He does create that competitive environment there. There's something on my mind and I'm a bit lost. Oh, so let's say that it was just you, that you didn't have six teammates at all. It's just you and Kevin training. And he puts a chart on a wall. Does it still—and I know where fantasizing on this—but give me your best gut feeling on this—if he puts a chart on the wall and you do this chart thing and there's no other person you're competing against, it's just you, does it still give you that positive reinforcement, positive motivation?

(13:40)

S: See then he might have to have a reward.

J: So if you score a certain level you're going to get a tangible result.

S: I think you need some kind of dealy, you know some kind of goal to get to. Not only for yourself, but as far as something like meeting someone or earning something.

POSITIVE REINFORCEMENT  
CHARTS-WHY THEY ARE NOT NEGATIVE (SEAN T)

J: Okay, what if, and I'm following you, so let's go back to the reality of it. Let's say you are competing and you lose. You know the goal is to win, whether it be team or individual, but you lose. Does it still feel positive?

S: If you lose a competition?

J: In training. If you lose the game, the chart.

S: Do you feel...

J: Do you feel like that's an element of positive reinforcement? Or does it begin to start feeling like punishment?

S: I don't think it feels like punishment.

J: How come? Why wouldn't it?

S: It feels bad.

J: It doesn't feel like punishment?

S: No, because you know, punishment would be being forced to do something you don't, that you don't enjoy.

J: And the competition even when you lose doesn't feel like punishment?

S: Right.

J: It's just disappointing?

S: Yeah, disappointing.

POSITIVE REINFORCEMENT  
PRAISE (SEAN T)

J: Not punishment. Okay, alright, how about positive reinforcement. Again some of the things you talked about for positive reinforcement: the chart, tangible reward although we didn't really talk about it much, it doesn't seem like he uses it that much with you? Here's you won, and not only do we know you won, but here's this, and the prize.

S: He did that last week and it helped a little bit.

J: What's more motivating, the chart/competition itself or the reward, the prize?

S: I'd put them the same.

J: Really? Exactly the same? What's more motivating, his praise, chart/competition, tangible prize?

S: Chart and the reward.

J: Are more motivating than praise.

S: I think so.

J: How come? Any ideas on how come?

S: Well I mean, praise from a coach, I mean, I think you should get that no matter what if you do something positive. I think that if you get that enough you don't need it as much. Does that make sense? I mean, I don't know how to put this.

J: I think I'm following you. Let me ask you this, it sounds like Kevin going back to the ten good turns, seven times he gives you praise—it sounds like Kevin does a pretty good job of giving praise. Let's say if on those ten turns you had a coach that only gave you two strokes there, do you think the praise would be more valuable when he did give it to you, or not? Just guessing here, just curious of what your thoughts are.

S: If he didn't give it to me as much?

J: If he didn't give it to you as much, would it mean more when you did get it?

S: I don't really look at the coach for praise—that's just who I am. I don't even in a competition if I nail a set, that was for me, not the coach.

J: Is that unique to you, or do you think that there are a lot of people like that?

S: I think that there's different people, some people need it. I don't need it.

J: You don't need the praise? How come?

S: I don't know. I'm not doing the sport for anyone else but myself.

J: This may be a leading question, meaning I may be leading you to an answer that I already think exists, so I'm trying to be careful here. Do you feel like because you have had so much success, that's factual information. You are a senior national team member how many times over?

S: Nine.

J: Nine?

(18:08)

19:00

J because you are getting in reward, when you ugo to competetions you are winning

J yeah, you know there a re varying levels of winning, if you didnt get it from kevin, do you feel like because you are getting so much in competition that you dont need it as much from kevin?

S correct, but if i would have never have gotten it, then thatd be a different story

J what do you mean

S like, if i never would have had success or good outcomes in competitions, then i didntt get it from my coach, that would proabby be a little discouraging

J before you started becoming this superstar of the sport, did you need the positive reinforcement more from kevin?

S i thin kas a young gymnast, you need that, definitely

J and he was ther to give it to you?

S yeah?

J how important was that developing for your self confidence? His positive reinforcement

S oh it was huge, you know that you got your coach to be happy with what your doing

J coaches approval?

S yea and that is always a good significant

J and that was really important when you were growing up, but less important now

S yeah

#### POSITIVE REINFORCEMENT PRAISE EFFECT ON SELF CONFIDENCE (SEAN T)

J how does that impact, developmentally, that praise, how does that impact your self confidence, does it?

S i think it does, i mean, growing up, if you dont get a lot of positive reinforcement at home or what you do at school, or at the gym, thatd be really hard. But if you all the sudden get it from your coach fro something you did amaxing, that couold do wonders for a kids self confidence. I know if did for mine bc i ddint excell at school and i had home issues, i think it makes you a better athlete.

J developmentally speaking, when you were growing in the sport what was more important for you performance, in training, what helped you to have better training? In terms of positive reinforcement, chart type stuff, tangible rewards, or the praise?

S as a developmental, the tangible reward, i always got that from my first coach

J so you do it, ill give you a coke, so developmentally that was more important than the chart, which has an element of the social comparison that's really powerful, the reward itself was more powerful than the social comparison

S yeah cause i don't think we had that when i was a little kid, if we'd had that, it would have been pretty motivating, if we had the tangible reward at the end of the chart

#### PUNISHMENT

#### INCREASED WORKLOAD, INCREASED SC AND PERFORMANCE (SEAN T)

J ok, let's talk about punishment, does Kevin use punishment in training?

S hmmm he did in the past yeah,

J how give me examples

S if you don't hit this routine, you've got to do this routine until you hit it, this was right before the olympic trial in 2000, i felt like crap, i couldn't hit a high bar routine, and he was yelling at me, and he finally said, if you don't hit this routine, you can't win this event, so i'd stay there 30 minutes and finally hit a routine, that right there alone was probably the biggest jump of my success i think, my confidence in competition, it was so easy, it grew instantly, just because i went through that low point, where i can't do that at all and it was impossible, and then i did it and it was like, if i can do it now, i can do it anywhere, easy

J so punishment in training contributed to self confidence in a very positive way, and also performance in a positive way

S yes

J ok, tell me more types of punishment used, so that's one which is do it until you do it right, you are going to stay until you do it right,

S yes

#### PUNISHMENT

#### SITTING OUT WITH BROKEN RULES (SEAN T)

J ok, other types of punishment that had been used with you?

S i think that was most important as an older athlete, as a younger athlete, i think punishment from my old coach that helped me, was if i did something wrong in my behaviour, i had to sit down and watch everybody work out, not participate

J ok so broken rules, you would have to sit out

S yes

J effective?

S for me it was because i was missing that opportunity, not being involved

#### PUNISHMENT

#### INCREASED WORKLOAD DOES NOT DECREASE SC (SEAN T)



J how does the punishment impact self confidence

S i think it hurts a little bit, it doesnt help

J so when kevin says you stay until you get it right, it hurts your self confidence?

S no not that

J whats the different, lets try to capture that, teach me in a way to teach other people

S so when i was comparing a kid to a man basically, i mean, the kid notbeing participatin gin something maybe makes him feel like a failure in a way,

J so when you would get set out for breaking rules when you were yonger, that impacted your self confidence in a negative way?

S yes

J short term and long term

S just short term, because i felt really down and i knew it was my fault, it was a hard lesson, but in the long term i think that really helped me but in the short term it hurt

J how does it hel you in th elong term

S it teaches you discipline an dbehavior, something i eally needed as a kid, so at that moment he said, ok are you ready to come back? And i said, yeah im ready, and your focused again and you dont want to mess up

J so when you were younger and got set up from broken rules, short term it hurtyour self confidence, whats the impact long term on self confidence? Is there an impact?

S i dont think so

J ok now lets go back to when kevin says you dont it until you make it, what was done , how did he do it in a way that it didn timpact your self confidence in a negative way, he used punishment, but it improved your self confidence and performance short terma nd long term?

S um huh

J so even short term, when he sways you have to stay until you hit it, your self confidence is ststrong

S yes

J why

S i think that breaking point in jumping to the next level there is a little bit of fear, maybe, and that was like very scary abd feearful being in that sitatuyion, like he was mad, i could see it in his eyes, i was like oh shit i better do this right, and kkind of in a competetion, you know, sometimes if yo uare a little nerervouos and you want to do it, and i think the fact that he is right there like a judge is right there too, you know, it puts you inthat momebnt, no matter how you feel,

J he scares you, he is using fear of failure there, but somehow, if we could figure this out, so many people could benefit, because so many coaches don't know how, he is magical in a way, that he is using a strict punishment with you and the result is that it boosted your self confidence

PUNISHMENT/RELATIONSHIP WITH COACH  
IF SC IS IN PLACE BECAUSE ATHLETE FELT COACH BELIEVED, THE SC  
DOES NOT DECREASE (SEAN T)

S why do you think jjjjjj is so successful

J but how is it that coaches can make you afraid, but that make you also feel strong, cause that is what we are talking about here, it made you feel strong even though you were scared, how? Can you find words for that?

S i don't know, i mean, how to put it in words

J is it because you knew he knew you could do it? Is it because even though he had you scared in that moment, he had you scared in a way that he knew more than you did about your own ability and what you were capable of

S exactly

J so is it that the punishment worked right there because he had laid such a strong foundation of support and positive, that when he did use the punishment, you still felt supported and strong

S exactly

J your sure, that is not me pushing me there?

S i know that is what is going through his head, he wanted it for me, and he had that in his eyes that he knew i could do it, and i was like shit i've got to do it, i can do it in a way

J ok so, let's jump to that balance now, how do that happen, so if you are going to coach coaches, how do you coach a coach to say, it is almost like what you are saying to me is that you have to have both the positive and the punishment, but i wonder if the punishment had happened before the positive, would the experience have been the same, like if your foundation of him believing in you wasn't strong, if your history with him had been rattled with thing like this

S it wouldn't work, because he did that with a couple gymnasts my age and it didn't work, it just didn't work because obviously they had something inside of them where they didn't believe in themselves, and it backfired, if it was the same situation with another athlete, it might not work

J why does it work with you?

S i really want it

J one thing you said it worked because he had made you feel so strong already

S yes

J second thing because you want it so bad, third thing, is there a special thing about you?

S i think so, i think not only for me but from the coach, i don't think every coach has that in him, i mean you had to respect the man, he can't be too nice, i mean it's hard, it's an individual thing

J well its awesome that you can point to a specific moment in time when his coaching impacted you in such a powerful positive way, its just almost overwhelming, i mean i get emotional thinking about how awesome that it, how many coaches cant do that, how many kids miss it, and that you were strong enough to respond too, im impressed with you guys

PUNISHMENT C  
NATURAL CONSEQUENCES OF COMPETITION (SEAN T)

ok,, so lets talk about punishment, in competetion does he use punishment?

S i think the competition itself is punishment if you dont have a good meet, yo uknow ,like if you dont make the cut, or you dont make nationalteam , that iss punishmnt alone, i think at that point you just need support from the coach

AS A COACH  
BALANCE, GIVE RESPECT BUT HAVE BOUNDARIES (SEAN T)

J ok, as a coach, and i know you do some coaching, as a coach do you believe in positive reinforcement

S of course,

J how much should it be used?

S a lot, i do 2 private lessons right now, and it think in this day in age, you have to treat that kid with respect, you have to helo their self esteem, and at that point the athlrete strats to get bettere, but you cant be too nice, or too close to them, you have to set boundaries, and make sure they are getting there work done, you have to be positive, that iss very importatn

AS A COACH  
POSITIVE REINFORCEMENT  
POSITIVE FEEDBACK (SEAN T)

J so give me specific examples of wha tyou use and think is important for positve reinforcement in order of importance

S the words you usefulness

J so praise and feedback

S yea always give an athete or kid a return basiclly, so that was good, but you bneed to do this

J you feel like that is the most importatnt thing?

S to a certain degree, fi you do it too mychk, then i dont think it is as effectively

AS A COACH  
POSITIVE REINFORCEMENT  
DECREASED WORKLOAD, CHARTS, PRIZES, POINTS (SEAN T)

J ok so other examples, so like kevin uses praose, the socail comparison, and then thoes tangible rewards

S ummm if you do it good this time you wont have to do another one, i think that is positve, and kind of a reward, like if you do three more good ones, perfect form, then you can be done

J so kind of the same thing, a little bit that kevin uses with you, but a little inverted bc he says you screw up, you keep doing it until you get it right,

S right but i think older athletes need that

J ok, so order of imporacna from your coaching standpoint, praise, letting them off the hook or reduced workloads, what else, what about this chrath thing or tangible rewards?

S yeah im ean i did that with a group of kids, i think tht something that is positive and helps is to have like a little competeiton ,like a little point system, if you jump on the spring board with your arms up thats a point, one point for a stick , so yo utry to get 3 points on this, i think that is pretty positive, ,and it gives them a goal

J do you see your kids resond to that

S oh yeah

AS A COACH  
PUNISHMENT-SITTING OUT (SEAN T)

J as a coach, do you think punihsmnt is important,

S yes

J how much, exampoles

S i dont believe in getting a child a strenth punishment because they wont enjoy the aspect of getting stronger

J so what is appropriate

S sitting out ,not partiicpatning, i rarely use that, it takes a lot for me to tell a kid to sit out and you are in time out

J but y ou will use it and you think it is importantt ot have it as a tool

S yeah because if you are a nice guy you will get walked over a little as a coach

Wesley

J so tell me about some of the motivation that Jason used as your coach in terms of what you thought worked and didn't work

MOTIVATION

MADE ME BELIEVE IN MYSELF (WESLEY)

W ok well some of what I think did work. I looked back with Jason, and I think he has a great ability to motivate me and make me believe that I can do what I set out to do. I think he either did believe it or was really good at acting like he did believe it. That worked really well at motivating me

MOTIVATION

AGGRESSIVE APPROACH

PUTTING TOO MUCH PRESSURE ON ME (YELLING IN MY FACE) (WESLEY)

Let's see, some things that didn't work...ummm..it took a very aggressive approach, so sometimes it would put too much pressure on me, sometimes it would work, but sometimes it would be just too much yelling, or too much in my face, and it would put way too much pressure on me

J ok, so sounds like what he did well was he had this very strong belief in your ability to perform, to win, and he did a good job of making you know that he believed in you, which helped you believe in yourself. And then what didn't work, you would say at times he was too aggressive, in your face too much, putting too much pressure on you

YELLING (WESLEY)

W yea, just like, if I had a bad practice, he would not give me much of an understanding of what I could do to improve, but there would just be a lot of yelling. But sometimes you need that, when it is just too much confrontation, I feel like you both just need to relax and figure out what you need to do to get it done instead of just snapping.

J yeah, how do you know the difference? How would you know when the yelling was good to get you fired up, but how would you know when you've crossed that threshold and it becomes too much

YELLING

WORKS WHEN MY EFFORT IS LOW

DOESN'T WORK WHEN MY EFFORT IS HIGH (WESLEY)

W I think, when I'm playing my hardest out there, and it is just not working out and I keep missing the skill, and the coach keeps barking at me, it's like, alright, I am trying the best I can right now and it is just not working, and they are just screaming in my face it just adds pressure. But if I was doing a set, where I keep missing, and Jason keeps getting fired up, and he's like you've got to kick up and let go of the bar, like yelling right in my face, at that point I keep missing, that might push me enough to make a change, it just makes me so mad, and I already feel frustrated, but confident as well, it kind of helps push me to get me going

J ok so maybe confidence is a big thing...so let's talk about reward? Did Jason use rewards with you in training when you did well

REWARD

GAMES INSTEAD OF PRACTICE

FISHING TRIP

ACTIVITIES OUTSIDE OF GYM (WESLEY)

W yea sure he played a lot of games, we went on fishing trips, we would do activities outside of the gym. In the gym, I think really we just played games more than anything else. If I hit the set, we'd get to play baseball

J so the rewards in training were like playing games if the work was done well, or fishing trips or doing fun stuff out of the gym

W and for me, he just made it real fun for me. So when he was happy, and I was doing well, he would make me feel good about myself, and that would be a reward in itself.

REWARD

HAPPY COACH

FUN COACH (WESLEY)

J ok so how important was the reward of him being happy with you? How did that compare to the games and fishing trips, what was more valuable to you?

W in the long run, the making him happy was more valuable when I look back on it. I could go on a fishing trip with any coach/

J ok, the happiness stuff was more valuable, but they both served as rewards

W yeah

J ok what about rewards in competition?

REWARDS-C

NOT MUCH

T-SHIRT EVERY NOW AND THEN

HAPPY COACH (WESLEY)

W not so much, there weren't really any traditional rewards, other than that he might have given me a t-shirt or something every now and then. Not so much

J ok, what about the reward of happiness?

W oh yeah, and when I did well, he would get excited, I was convinced that he knew what I was capable of and that made me happy. That is what made me get to where I am, when he would believe in me. If he wasn't like that and never made me feel capable, I wouldn't have been nearly as successful as I was

J so how do you think the rewards affected your performance? Do you think making him happy or the promise of a fishing trip impacted your performance

REWARDS-T

EXTRA EFFORT (WESLEY)

W not the fishing trips and stuff, and would say rewards in training worked really well for me, I would tend to put extra effort in

J ok so when he would use those rewards in practice, it would definitely impact your performance because you would put more effort into it.

W yea

J you had said that his belief in you was really important for your ultimate success like competition success. Could we say that the happiness and belief in you and that was a reward that impacted performance?

REWARD

HAPPY COACH

QUOTE (WESLEY)

W yeah I would say that it had an impact, not a significant impact, though. I would say if I hit a routine and he gets excited, we are going to the next event with more momentum. I

J so let's talk about the reward-based motivation, did that impact your self-confidence. Do you think him believing in you was something that you internalized about believing in yourself

REWARDS

SELF-CONFIDENCE (WESLEY)

W no I think more the rewards motivated me to do it, I already had the self confidence, I don't know if the rewards increased that

J ok, what about making him happy, umm would that impact your self-confidence.

REWARDS

HAPPY COACH

SELF-CONFIDENCE (WESLEY)

W yea that would make a huge impact, by knowing that Jason believed in me, he always made me believe that I was capable of doing it, and I think that was the most important thing for me.

J ok so the rewards didn't necessarily impact your self-confidence, but what did was his confidence in you. Not the rewards necessarily.

W yeah, his confidence in me was more beneficial than the rewards

J ok, did Jason use punishment with you in training?

PUNISHMENT-T

BAD MOOD

KICKED OUT OF PRACTICE (WESLEY)

W yeah, I mean, he would just snap into a bad mood, which was just really unpleasant to be around. He would send me home a few times. When he was in a bad mood, it made it really hard because he was usually only in a bad mood when I was setting him up for that mood.

J did he use punishment in competition

PUNISHMENT-C

BAD MOOD

YELLING, THROWING, TANTRUMS, NO SPEAKING, ANGER (WESLEY)

W no, just the bad mood type of thing. Yeah that is punishment for me. There might have been times he made me do strength for punishment, maybe once or twice.

J can you give me an example of this bad mood? What would it look like?

W yelling, to throwing things, to just like tantrums, no speaking to me, just anger, sometimes it motivated me, but most of the time it just made workouts harder

J ok how do you think the punishment affected your performance in competition?

PUNISHMENT

CAUSES "I DON'T CARE ATTITUDE" AND THEN IT WORKS (WESLEY)

W I can remember one time in a competition and I missed a set and he was mad and it made me pissed off, so I got to the point where I said, I don't even care, I am going to make this set. And then there have been times where he has put me in a bad mood and I can never pick it back up.

J what do you think happened more often

W I would say a lot of the times, he would get mad, and I would still end up winning the meet, bc that is not going to stop me from doing what I do

J so what percentage of the time did his punishment help me versus didn't help

PUNISHMENT

EFFECTIVE VS NOT (WESLEY)

W I would say 30 helped 30 didn't and 40 I just blew it off and shut it out

J what percentage was helpful, what wasn't

PUNISHMENT

COACH BELIEVED IN ME

MAKES ME MAD (WESLEY)

W well it was almost like 50/50; even if he was in the worst mood ever, he never made me feel like I wasn't capable. So it never botched my self confidence, but when he is pissed off, sometimes I would get pissed, too, but it wouldn't ruin my meet. And even though he was mad he would still be like, come on, let's go, get this set

J the punishment you, but in a way that he still believed in you, and that belief in you was the big piece. So your coach was able to punish you, but still make it clear that he believed in you, and that felt helpful, that you still knew he believed in you

QUOTE ON IMPORTANCE OF COACH BELIEF (WESLEY)

W yeah, and I don't know that the punishment was helpful, but he had already built my confidence previously, so I knew he knew I could do it

J how do you think the punishment affected you in training?

PUNISHMENT

CAUSES BAD MOOD (WESLEY)

W well in training, if he would get in a bad mood, then I would get in a bad mood, and then the practice would just suck, it was just pointless

J so you feel like the punishment in training was really not very effective at all

PUNISHMENT

NEED REASON (WESLEY)

W well sometimes it was motivating, if there was a reason, then that would fire me up, but if it was just outrageous, it would just set me off, and it was just hard for me to get back

J so on a 10 point scale, 10 is as pissed off as he could possibly be, what level would he bad mood be to motivate you, but not break you down

PUNISHMENT

COACH BAD MOOD (WESLEY)

W If it would get about a 6, things would generally start to turn, if it got more serious, it would start to affect me more.

J how do you think Jason using punishment affected your self-confidence



W I don't think it did

J bc he was able to separate that, bc his punishment was being in a bad mood, but even being in a bad mood in didn't negatively affect you

PUNISHMENT

QUOTE

DIFFERENCE BETWEEN PUNISHMENT AND BELIEF (WESLEY)

KEY COMPONENT: IF COACH ESTABLISHES BELIEF IN THE ATHLETE IT OFTEN TIMES MAKES PUNISHMENT MORE EFFECTIVE (WITHOUT BELIEF PUNISHMENT SEEMS INEFFECTIVE)

W when Jason would punishment, he wouldn't punishment by making me feel like I wasn't capable, he always made me feel like I was capable, and that is why he was getting so upset, so now that I say it like that, I think it did affect my confidence. By him getting so upset bc I wasn't doing a skill the right way, he knew that I could do it, and he made sure that I knew that he knew that I could, and he was pissed bc I wasn't doing it. I don't know If it builds my confidence, but it doesn't bring it down any

J so give me some examples if you can, how would he accomplish that? What things would he say or do that would cause you to still believe in yourself even when he was punishing you

COACH BELIEF (WESLEY)

QUOTE

W the worst thing a coach can ever do is say to an athlete that they are not capable of doing something. Once you know that your coach doesn't think you are capable, when you realize he doesn't believe in you, you start to convince yourself of the same thing. No matter how bad the gymnast is, you correct them, but you don't ever let them know that you don't think they are good enough, bc once they know that you don't think they are good enough, they think that

J so how did he do such a good job, what would he say to you when he was pissed, that he was still saying that I am mad bc I know you are better than this

DEVELOPING BELIEF (WESLEY)

W he would always say come on, man, you can do this, let's go. He just let me know that I just need to made these changes, and I can do it.

J he always made it clear that he believed in you, even when he was pissed

W and if he would just shut down, and not talk to me, it would make me try harder bc that just sucks, if I would start turning practice around, he would start to come around

J now in terms of the 1-10 scale, would you say that would be at the 6 or below which would motivate you to work harder, or would it be high enough to make you not care

W that's kind of around the same range. I can handle it up to a certain point

J are you doing any coaching at all

W yeah, im coaching some little guys,

J ok think if you were coaching an older guy who was really talented, would you use reward-based motivation with your athletes

AS A COACH

REWARD

14 YEAR OLDS, WATERPARK OR MOVIE (WESLEY)

W if it was an elite-level athlete, then no bc they are working for the reward. But if it was like a 14 y ea rold then absolutely I would use rewards, like maybe taking them to a waterpark or a movie or something, trying to balance the fun to keep them motivated, especially with a younger gymnast

J ok so you would use them to increase motivation to work hard and train hard,

W yeah

J how much would you use those rewards?

REWARD

HOW OFTEN (WESLEY)

W oh maybe once a week, like if you guys do this then we will go to a movie or something

J how often did Jason use rewards with you

W like once or twice a week we would at least play a game or something

J and the bad mood thing?

W that could be in the same day I was getting the reward, it just depends

J would you use punishment with your athletes

W yes

J what types

PUNISHMENT

EXTRA CONDITIONING

TAKE REWARD AWAY

SEND THEM HOME (WESLEY)

W I am not much of a yeller, I think It would depend on the athlete, some guys condidtioning isn't even a punishment, so sending them home, taking away the rewards

Jok, why, what is the point of using the punishment

W I would punish a guy when he was not putting in his work, and not taking real turns

J is that based on performance, or effort or something different

PUNISHMENT

WHEN NOT WORKING

EFFORT AND PERFORMANCE BASED (WESLEY)

W I think it is mainly based on effort, performance as well, you have to consider the athltet, and no matter what, everyone is not going to be able to do something in gymnastics. You still make him feel like he can do it, you can make him work harder and do conditioning

J but if you think the athlete is not putting effort in, you think that is a good time to use punishment

W yeah, I think so, if it once who is coming in and not doing what he is supposed to be doing, you have to put in punishments to make him do it. I like to vary it up so they don't always know what is coming

J ok, so how much punishment

PUNISHMENT  
AS NEEDED (WESLEY)

W well hopefully not too much, if everyone is doing what they are supposed to be doing, and not being respectful, then it wouldn't be ever, but that is not the case, so it depends on the group

J so more as needed, and when you say respect, what goes in to that respect

PUNISHMENT  
BROKEN TEAM RULES (WESLEY)

W yeah, like then you are talking and they are running around the gym, and talking to the person next to them, or sitting down all the time.

J ok so not working hard or breaking team rules

W yeah

Justin Spring 1.13.09 (57)

M- As an athlete with John as your coach tell me about the type of motivation he used what do you think worked what do you think didn't work out why?

TYPE OF ATHLETE  
SELF-MOTIVATED

## COMPETITIVE (JS)

## COACH USING EMPATHY (JS)

## POSITIVE REINFORCEMENT

## GOAL-ORIENTED

## EMPATHETIC FEEDBACK (JS)

J-Um as a coach, you know, I think that I am a very very self motivated individual. Um and so John didn't have to work too hard. Um I've always been kind of the type of guy that's been into always have to be the best no matter what it is. Whether I'm playing darts with friends, whether uh I'm competing at the Olympic games. I hate losing you know so I've always been very competitive. I am a very motivated and driven individual but with that aside, every great athlete has his days where you just don't want to do gymnastics was, and John was very good at getting me to do, getting me to do, the workouts—these days and he is god at reading me, uh empathizing with me first. He would be like you to know I know things are tough. I'm sure you're sore, you know I know you've been practicing this for awhile, um and empathizing really made me listen when he would end the conversation with look we've got an end goal have and kind of showed me how positive. If I did have a good workout that day—how positive that would be towards our end goal. You know he would be like look these are the kind of days that you know when you're tired, you've been pushing hard for 3 days in a row, you know pushing through today is going to get you prepared for that kind of situation. You know and so if we can even get anything out of this you don't have to do a full routine today which may have been on the plan, but if you can get anything positive from today that is gonna be, that's going to come out as a positive as a while for the day. So let's try and do something today. And I'll be like, all right let's go let's get it done, I can do it you know

M-Ok, so I think what I'm hearing is John did a good job on those tough days of keeping you focused on what some of the long term goals are and it sounds to be tried to take a positive approach to it. Instead of threatening you with consequences, he was more of appealing to your long term goal aspirations through a positive lens. Is that accurate or am I off base, here?

## NEGATIVE CONSEQUENCES

## INELIGIBLE (JS)

J—you that's accurate I really don't believe negative consequence work that well I really don't. I grew up with my dad in the military you know and even I think long term negative consequences if you tell a kid he's going to be ineligible at the end of the semester if he doesn't do well at school he doesn't want to be ineligible but I don't think he wants to be he kept thinking about that at a daily basis. My dad gave me some huge positive reinforcement things you know if I got straight A's and stuff I wasn't constantly thinking that "I've got to do this for the car or I've gotta do this for I wasn't thinking that—those goals kind of fade out and you need a constant reminder and I don't think that those long term negative or positive goals work—at least not for me

M-ok and we are going to talk more about that—we're going to talk about the specifics—again let go with John with this—did John use rewards with you in training

## POSITIVE REINFORCEMENT

## LUNCH, DINNER (JS)

## REWARD

## DECREASED WORKLOAD (JS)

J—yes, occasionally he would fire off lunch is on me if you do well on this routine—and you know, some people might say "you know that doesn't really work well for me—but I think it really does um I don't know—it helped motivation but I don't know if it was a positive thing—well maybe it was—I don't know, looking back, it was usually on high bar, bc I struggled with high bar the most and he would put one of those things out there like hey if you get like 5 hits or less on this routine I'll take you to dinner, and I would be like I really want this, so I was put more weight on this routine, and it would become more stressful and kind of recreate a meet situation because you really want to hit on a meet and I really want to go to sushi dinner, you know back in college when I didn't really

have much money—so that was good and a lot of time in practice when we would get high numbers in a routine—about the pursuit of perfection—so the reward is less numbers if you do the first couple ones better or if you make the first 3, you know you have to make the first one, so you know he would kind of reward if you make it the first time, you know, you can stop there, or you have to do 2 routines or 3 routines, but with recreating the competition you know making it the first time

M-Ok what about in competition—would he do reward type incentives in competition for good performances?

POSITIVE REINFORCEMENT  
COMPETITION (JS)

J-Well not really, he didn't really need to because the desire to do well at competitions was just so strong for me and he didn't; really need reward because it would just be trumped by my desire to do well, you know I really didn't—if he was like Ill give you 1000 dollars at this competition, I don't think it would matter, Im doing to do how Im going to do at a competition how I m going to do at a competition regardless. It gets more difficult when you get into kids you have no desire to even be in the gym so you're like what are you doing here—but for some reason theyre there

I didn't; need a reward to do well—for me, doing well in a competition was rewarding, I liked doing well that's what got me to the national team, the rewards were there, you know.

M-Ok, let me ask you some more specific ex of the rewards he used in training—I know you said something like he said ok, you hit this routine and Ill tak you out to lunch, were there other things that he did in terms of rewards in traing that you can remember

POSITIVE REINFORCEMENT  
REDUCED WORKLOAD (JS)

J-um well like I said witht the redudction of numbers like if you hit th efits one then you can be done, so like pommel and the struggle with that—so maybe if I have 2 routines on horse that day—he would say, if you hit the first one, then you're done—so I really wanted to hit that first one to make it done to make it clean

M were there other ex swo the 2 you listed before are so, ill take you to lunch and things like that or you can be done if you hit this or reduced work load, other examples of rewards like that in training

J—by the way htose were immediate or the rewaerd was right away—I don't think so I mean it does not come to my head right now

M-ok, that's fine, tell me about how often you think he would do soething like that, how often would the reduction of work load or something like ill tak you out to lunch or something happen over the course of a week

POSITIVE REINFORCEMENT  
HOW OFTEN (JS)

J taking me out to lunch was rar, it was random if he just felt like throwing it out there, the reduction of work loead that happened very often with even just the way the instruction was given out, if we were doing 2 routines he would be like well here is the prize, I always tried to be efficient and get done quick, and Im driven by that reduced work load, like some guys want to do more anywaqy, buit I was always driven by that not having to do excessive work um than I had to

M ok so if you can try to put it into—ok so ill take youout to lucn, once a week, once a month, how often did it happen

J-oh um once every 3 weeks maybe

Mok and then in terms of the decreased work load—how often did that happen

J—once every 2 days maybe, once every day almost

M ok so maybe once a day once every couple days

J—yeah but to different levels

M—yo mean to difference degrees but the concept was the same—do well on this, and you'll have to do less of it

J—yea

M ok let me ask you this, bc this less work load, I think some athletes could have viewed this as a consequence, like, if you didn't hit 3, you will have to do 5

#### POSITIVE REINFORCEMENT

##### REDUCED WORK IN SEASON (JS)

J and I was just going to say that, if I missed that first routine, it was like @%#\$\$ now I would have to do, that routine doesn't count because I didn't hit it, and I would have to do 2 now and I would have to go back to where I started, so I can see what you mean, but I think with that said, we only started doing that with routines, so it would vary with the level we would do it with, we only started when we needed to get into routine shape and we needed to recreate competition day—if we were only making 25% of the routine, we wouldn't do that, bc it would just be bad, but when I had a meet in a week, you know we are tapering down the work load, that's when that would come up—so yeah I'm glad you brought that up, so that was not used for routines, you know, only as we got close to competitions

M —it sounds like you got the option to choose to do that bet, as you call, meaning hit this or do this extra amount, did he do that or just on certain things?

J I would say with John there was almost always an option to choose

M—I'm really curious about how he turned that reduction of work load into you viewing as positive rather than another athlete viewing it as a consequence

J—well with strength, that's how instruction was given—it was make 3, or do 5, but with routine, we have a weekly schedule, so I know going in to that practice how many routines I had to do on horse already, so it was like look, I'll give you a chance to ---you know---

M—so the routines are the reward based, and the strength was more —I don't know if you would say consequence—but more set in stone—which one was the reward?

#### POSITIVE REINFORCEMENT

##### REDUCED WORK

##### BASED ON PRE-DETERMINED PLANS (JS)

J—they both were reward I mean, well, yeah, with strength it was like it doesn't really matter, but routines suck, no one likes doing routines, it was nice to get them done early, so that was my reward, but with horse, we would go into practice knowing, ok I have 2 routines on pommel horse that day, I have one floor, and parts on high bar, that was my work load for that day, and we'd go in and be stretching out, and right before I would do my first horse, right before I'd salute, he'd be like, ok here's the deal, then he would drop it, so in the back of my head I was always prepared to do 2 routines

M—ok I get it, so the key then to take it as reward was that there was a predetermined set or work load

J yeah I already knew I was doing 2 routines, he gave me the opportunity to make it less

M-ok Im going to ask if this is the truth, you tell me no he made it a game by giving you an opportunity he mad eit fun to reduce that already predetermined worked load

QUOTE ON VALUE OF REDUCED WORK  
PREDETERMINED SCHEDULE (JS)

J-yeah absolutely, that comes with good planning and good scheduling and that's why it was positive, that's why I was always like, I want to hit this and get don early

M—ok I got it, that makes perfect sense

J—if you go in knowing that this is your weekly work load, which we didd, we went in knowing the plan, righth before I start my first routin, he goes, well I tell you what, if you make the first 2 routines, you don't even have to do the next one, or if you make the first routinewith .5 or less, then you only have to make one more

M—I got it.

J-so I was going to do 4 anyway, but I have the opportunity now to reduce my workload

M-I got it, so it all stems from the predietermined workload that was already in place

J-yeah it all comes from the schedule, routines is a mental block for guys, so I cant do that without predetermined schedule

POSITIVE REINFORCEMENT  
POSITIVE FEEDBACK (JS)

M I got ya, do you view the way john spoke with you, so just the general language he used, do you view that language as positive, negative, or neutral

J-the general language that he used with me 90% of the time it was positive

M-ok, how did that positive language impact your preformacne, your ability

J—well there's still criticism, hes got to tell you whats wrong with your routine and stuff

18:00

M ok, but go 90 % of the time he tried to filter it through a positive language

J I believe so, yeah

M Ok did that impact your performances, your ability

J I dont know

M Ok

J But, but like I said the thing, John and I talked about this all the time. I was the athlete when something upsets me- I took it in a positive way. When he would try and make me better by telling me

FEEDBACK  
PROBLEM FOCUS (JS)

J: But, but like I said the thing John and I talked about this all the time, I was the athlete when something upsets me—I took it in a positive way. When he would try and make me better by telling me I needed to fix that—that works with me whereas some people are like—what the fuck do you want me to do? You know I’m trying. And John still told me that’s the one, one of the things that put me on a national team—you know that’s what separated me from some of the other athletes. Was it that he constantly said things to me because he knew I would take it personally—it’s possible I don’t know. John didn’t coach other athletes like he did me because he knew how I would respond. We had worked together and you know with most coaches you need to show them your commitment before they will commit to you.

M: What do you think caused you to have that ability even when there were negative things said to you, you were able to still have the high self confidence to still let it drive you in a positive way—where did that come from?

J: Is it going to piss you off if I say I don’t know.

M: Not at all, I’m trying to figure out how we can bottle it up and sell it.

J: There’s one thing about a gymnast , don’t correct the first set or skill, I hate it. And the athletes I know hate it. We’re warming up and coach comes in and throws a correction on that first turn or a tough first skill. I’m like John, it’s the first one, lay off. You know he’s kind of learned to say first one. And I say yea and he’s like o.k. I know this is a side note but I thought you might like to know.

#### POSITIVE REINFORCEMENT FEEDBACK AND SELF CONFIDENCE (JS)

M: Okay, sounds good. Let me ask you another question. How do you think John rewards you know that you kind of explained to me as well as maybe that positive language he used. How did that impact your self confidence?

J: Um I, I always had a lot of self confidence, um but there were times coming through injuries and things like that where I’ve doubted my ability for an immediate goal so I was kind of getting down on myself and a lot of times John would be like, look if we stick to this plan you know and we keep doing what we’re doing. By this time next year you know you’re going to be ready and you’re going to kick some ass and uh talk like that then really did help. Especially related to my injuries because I was always coming off injuries. When I struggled with you know getting back with the timeline. Those are the times when that talk helped a lot—whatever and some kinds are down all the time so that’s going to help.

M: Okay do you feel like the way he tried to stay positive and reward was helpful for your self confidence?

J: Yeah, definitely.

#### PUNISHMENT NOT REALLY USED (JS)

M: Okay, okay. Let’s shift now to we’re going to focus more on punishment. We just kind of finished the section on reward. Let’s again you know with John. Do you feel he used punishment with you in training?

J: Um, not really.

M: Are there any examples of any times you can remember him using punishment in practice?

#### PUNISHMENT BROKEN TEAM RULES (JS)



J: Um, yes but that would work. Like if we showed up late for morning practice or slept through morning practice, we had punishment

M: Okay, so the way he would use punishment, if you came in late to practice. Could you call that, could we put that into a category of if you broke team rules there would be punishment?

J: Absolutely, yeah.

M: Okay I want to be clear here too. Were those team rules always known? Did you know you were breaking a team rule when you broke it?

J yes, you know if you didn't show up a time, you know you messed up, yes

M ok and what about using punishment in competition, can you ever remember johnn using punishment in competition?

PUNISHMENT-C  
NEGATIVE TALS (JS)

J Well competition, you see, we sucked all last year and then we finally go our heads out of our asses and kicked ass at big 10s and nationals, Im i don;t know what it was we; i will say Jon stayed positive through the first 4 or 5 meets, and then when we got into the post season, the talks became more and more negative. You guys have eto figure it out, what are you guys doing? You know I don't know if that's punishment, but and then we would stack up routines if we werent' hitting but im not sure their punishment. You know it was seeing where we needed more work and knowing we needed to do it.

M ok would you view those negative talks as punishment?

PUNISHMENT-C  
QUOTE  
NEGATIVE TALKS (JS)

J:Yeah, a form, becaues it always made us feel like shit afterwards. I remember one specific one my freshman year, i fell on my neck on high bar, the rest of my routine i did horrible. The worst meet of my college career. We got on the bus and all of our parrents were waiting in the resteraunt and John ripped into us for like 20 minutes probably. Did that make me train harder the next week, did that make me care more. Absolutely not, I don;t think so, you know. It made me feel more like shit after I already had a bad meet. We were all motivated actually, I dont want to say that because i like I said there are some kids in the gym right now that just don't give a shit what anyone else thinks, and some of these kids are on scholarship, so everyone is different. But me after coming off a bad meet, the motivation was already there. Im pissed that i had that bad meet. I want to go back in there and you know, even after this Olympics, i didnt get an individual medal I wanted, let's go learn some new shit, let's get ready to tear it up next meet-you know, next olympics. Yeah so maybe those negative talks were punishment in a form. And they are countereproductive bc when you are down already about a poor meet about a poor practice, your kind of need that how you gonna fix this. Let's go out and make it better instead of like, how are we ever going to get you guys in routine shape or you guys suck. Because then your like man we do suck, we don;t have a chance. And i dont think we are going to do well at nationals instead of being like we had a shitty big 10s what we need to do to get ready and we're going to have a good meet. Yeah, its not punishment per say, but nonetheless, i don't think it was productive.

Ok, so how do you think those negative talks impacted your self confidence

PUNISHMENT  
NEGATIVE TALK  
SELF CONFIDENCE (JS)

J for me, i mean they made me, during that time i felt like shit, but afterwards, i was like, whatever, i didn;t take it seriously I guess, let's put it that way

M and going back to something we talked about earlier, do you feel like in terms of self confidence. Your self confidence is probably higher than most athlete, lower than most athletes or the same?

J I would say much higher than most athletes. Ans I think that helps competing. I think that helps training and you know I think having self-confidence in yourself as an athlete is extremely important.

M I want to go back to the punishment John would use when you broke team rules. That punishment feels different than the negative talks after poor performances, what would the punishment be if you came late to practice or broke a team rule. Can you give me some examples.

PUNISHMENT  
BROKEN RULES  
INCREASED STRENGTH (JS)

J Uh, if it was the first offense, it was just, you. Just run a mile, you know. You can't let bad things go unseen or unpunished. So it was nothing terrible but just run a mile after practice or 5 rope climbs or something.

M Ok, ,so he would use some sort of a strength and would he put you in a position where that strength was seen by other team members or was it done privately.

PUNISHMENT  
QUOTE  
NEED FOR PUNISHMENT (JS)

J it was always seen by other team members because I think in a lot of ways it was about the other team members. It's more about maintaining the team dynamic. If there is 1 kid showing up late to practice every day, the other teammates are going to be pissed off. As a coach, you have to keep the balance, you know. If someone is showing up late to practice every day, you know he just rolled in like it's ok. You've got to show the team as well as the individual that won't stand. There has to be punishment because if everyone else follows the rules and one person isn't and there's no consequence, you are just going to have problems on the team. You can't get away without being a team player or there's going to be some punishments

M.-And when you say not being a team player, you mean one concrete way of know that is if you are not following the team rules

J Exactly yeah

M in terms of using punishment with not following team rules, how did that impact your self confidence? did it?

31:50

J i think so. if you screwed up a few times, he would have the team run with you, so your actions in practice or whatever you did wrong, now you just made the whole team run a mile and the whole team is pissed off at you, and usually if you had a team player and just kind of screwed up, that works, you never want to have your team run, and that usually works, that sucks, i hate having to do that. You get guys that say, ill run 10 miles if the team doesnt have to run, dont make the team run. cause ill be like yeah whatever, ill run a mile, but others its not enough to make them give a shit, but there are some individuals who dont care, he doesnt care, he doesnt want to be there, he is just there because he has to be

M ok so for you though, if you ever got to a point where your team had to run as well, how would that impact your self confidence, would it?

PUNISHMENT  
IMPACT ON SELF CONFIDENCE (JS)

J i would feel bad, i would feel horrible, but i dont think it would effect my self confidence

M ok, not lets open it up...in turns of using punishment (those negative talks, running, strenght consequences) how did it impact your abbbility to perform?

PUNISHMENT  
PERFORMANCE (JS)

J me, i dont think it ever rally impacted my ability to performe, but i never struggled with competin, i was nevrerr the one who clamped up in competence, i enjoyed competition; but some guys you could see that getting yelled at after a shitty meet, in the next meet, thhey would be like "o my god if i dont get this routine, i may not competee again, and I was never one of the guys that had to worry about that. i could see other guys that it affected them negatively.

M ok, now lets shift over to as a coach, and i know youve done and are currentlky doing some coaching--as a coach, do you use reward-based motivation with your athletes

J yes, i want to think that we do

M what types

REWARD  
AS A COACH  
POSITIVE TALK (JS)

J there is not a concrete reward--it is more about the team--when you came in and did the speech about the ultimate goal of the team--when talking to the guys, im like "look its not about this meet, or this, we need to focus on nationals and getting you guys ready for that. i would say positive talk, but thats not really rewards. im always postive talk but I dont know if we use rewards

M ok, so you are making a connection of you talking in a positive way; do you view that as a reward

J yeah bc i guess if you view negative speech as a punishment, then i guess you can view positive speech as a reward absolutely, encouragemtn, positve reinforcement, of coures, sure

M why do you do that, why do you try to have the pos encouragement

REWARD  
POSITIVE TALK  
INCREASED MOTIVATION  
INCREASED SELF CONFIDENCE (JS)

J bc it keeps motivation high, it keeps guys going longer, doing more. Doing negative, its like scaring a puppy, motivation flies out the window, youve got to be positive, especially with what they ar eoding in the gym bc you know they are better than that and they are having a bad day, and keeping a high level of self confidence, like i said before self confidnce, they get better work outs they are better competetors, i think

M ok, can you give me examples of the positive reinforcement. in addition to your language and the things you say, are you doing competetions in the gym with them? are you taking them out to lunch wihen they do well? are you playing training games with them. give me some examples of the positive reinforment that you usefulness

REWARD

ALWAYS START WITH POSITIVE (JS)

*KEY PATTERN EMERGING: PUNISHMENT WORKS BETTER WITH SOLID BASE OF POSITIVE*

J umm i am like, look guys, its early in the season, you are going to have mistakes, but turnin the bad things into the positive, these mistakes are going to help you learn, and they are only going to get cleaned up, and the routines are going to get better. we dont expect you to be perfect. we dont ever expect you to be perfect, but keep your head up. things like that, always looking to the future andd how even if you had a bad performANCE, there are positive things in that, there is learning from your mistake. you focus on the good part of the routing before you address when you fell . always identify the positve things first

M it sounds like you are identifying the things they are doing well, but it also sounds like you ar ebeing very focused. with what you just said, i didnt hear a lot of "these are the things you are doing well, and these are the things you are making mistakes on. more of the solution focused talk like "these are the things you are doing well, ande these are the things we need to do in the future."

REWARD

TALK ABOUT SOLUTIONS VERSUS PROBLEMS (JS)

J absolutely, that is what the guys need more than just telling them what is wrong, because alot of times theyve been told what is wrong a thousand times, and they know, but how do i fix this, and sometime i dont know and sometimes i tell them that. i can see that you are doing that because we talked about it bfore, but lets try again and use a video camera to see how we can fix it. so yes, it is always solution focused

M and you think that helps you to keep things more of that positive reinforcement feel in the gym?

COACHES JOB TO GET THEM TO BELIEVE (JS)

J always alight at the end of the tunnel, if you have a horrible day, nothing has gone right, but this part of the process to getting to that light at the end of the tunnel. you are going to do 20 shitty routines before you have 20 good hit routines. and that shows them the positvie side. it is ogin gto be way worse before it is way better, and that is just the progression and it just takes time. hopefully they believe that and if they dont, you have to make them believe that.

M ok so in terms of using that positive language, do you think it impacts your athletes self confidence

REWARD

POSITIVE FEEDBACK (JS)

J using postive language? absolutley, it keeps them solution focused and "eyse on the prize" work toward the future, yes you are having a bad routine day or practice, buit look, it is not about today, it is about that big goals that the team wants so badly coming up. by giving them a way to identify how to fix these problems, it makes them, yeah we have problems, but we are going to fix them, so its ok, instead of being like "youve got these problems, youve got these problems," because then ththey are tlike SHIT, what are we going to do? they need to have plan. if y ou have a training plan, if you have agoal, a way that you are going to show that you are going to get to this big outcome, then it doesnt seem so hard anymore.

M ok, that sounds good, lets shift over to punishment now, as a coach, do you use punishmetn

J yes, i use punishment only with breaking team rules

M ok what times of punihsmnt do you usefulness

PUNISHMENT  
BROKEN TEAM RULES  
EXAMPLE (JS)

J well, team rules, we expect them to maintain a level of academic strength. you are students first, then athletes, so if there grades are, i would take thme out of the gym. some guys are here to do gymnastics, and thn academics on the side, but that is not my view. if you are not academic, it doesnt matter how good you are at gymnatsits. we used to have study hours. a lot of them had problems studying, so we got them an academic counselor, so we found a way, we had a meeting wiith a tutor and a counselor, to incresare the workload, in a wy that thhey believed would help them succeed in academics. We increrased there study hourse so that it actually worked

44:00

instead of just saying, yeah you guys put in the extra hourss in your study hall

M Ok what if a guy comes late to practice or breaks some of the team rules

J run 20 laps

PUNISHMENT  
INCREASED CONDITIONING/STRENGTH (JS)

M so you used some of those consequences from when you were an athlete, so if someone breaks some team rules, you have them do some conditioning after practice, im curious, do you make it visible to ht other athletes as well

J yeah usually we have them run, but we had routines that day, you the track is up three and you start running as the team is stretching out. Like i siad, i believe in that, if you break team rules, ,there have to be consequences, and i think you know running is something that is good for the guys, andthey dont always want to do it, but something easy to do, i think it works

M ok, last questions, why dont you use punishment more in practice, and i dont mean like with broken team rules,but i maen when an athlete isnt performing, why not use punishment, why arent you using more punishment in practice or after competitions if they perform poorly

PUNISHMENT C  
NOT A GOOD IDEA (JS)

J i thin kit is counterprodcutive, i dont think it helps, i think if you perform poorly in a meet, it wasnt your desire to do shitty, it wasnt part of your goal, or you werent trying to do poorly, and i guess, i dont feel like punishment is warrented when you struggle with competition, i don;t think it helps, it just doesnt help. To me, it didnt help, if anything, it make me think less of my coach, if he is going to come down on me, i remember john came down on my at the olympics, and i had a shaky first day of the olympics, i didnt make any individual finals, so that was one of our goals before the surgerys i had, we did well as a team, i was on a high, we made the second day, the first thing john said to me was just a negative comment, and it just brought me down, and i know in my head i was like, fuck you, you know, immediatly lost respect, and i didnt even want to listen to him or be around him, you know because i could only imagine had i been pissed off and then he said that, i probbaly would have snapped, it is not productive, it makes the coach seem ignorant, its just horrible.

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55 Mike Fillah Jan 6 2009

MOTIVATION  
GOALS (MF)

J Tell me about motivation your coach used with you, what worked, didnt work, and why

M Well, a big motivation was just to perform well in the championship meets, so in the big 10s and the NCAA championships, we were motivated to have a high rank in them , so you kind of set a high goal for us to be in the top 3, and that seemed to really keep the team motivated

J using goals to keep the team motivated, so it sounds like your talking about some internal motivation, so using goals, it seemed that goals worked pretty well, how so?

M it helped us to stay focused on a certain task at hand that we wanted to accomplish

J do you remember if John used a lot of rewards when you were in training

REWARD  
COMPETITION GAMES  
DECREASED PRACTICE (MF)

M there was one game that we played that worked really well. We split the team up into 2 separate teams and whichever team hit the most routines in a given week got to skip one day of morning training the following week

J ok so, the reward, remember the question i asked you was reward, what did you use as the reward, the game itself? The skipping of morning practice, or both?

M uh there was competition within the game itself which helped a lot, but the motivation, the goal was the skipping of morning training,

J so i hear the theme of goal coming in there, and the goal being to avoid morning strength, was the reward, and the vehicle to get to that reward was playing the game

M right

J was playing the game enjoyable? Did it feel like that was a reward kind of in and of itself, even if you didnt get the reward, was the game enjoyable

M yes, just being in the competition against other guys broke up the monotony of training, it gave us kind of a new fresh outlook on what we were doing, so it felt, you know when you would hit a routine, the rest of your team would be very excited, and that was a rewarding feeling to have everyone else pumped up and really motivated to do well

J ok, so even if you missed the goal or reward, the game itself had a component that felt like you were being rewarded just by playing the game

M right

J what about rewards in competition, did john use them?

REWARD-C  
DECREASED PRACTICE (MF)

M not too much, i think there were a couple of times when we got to miss a day of morning strength if our team had over a certain hit percentage at the meet, but we didnt do that very often

J how often, just give me a ballpark

REWARD-C  
HOW OFTEN (MF)  
EXAMPLE

M maybe once a year

J once a year, john would say if you have a certain hit percentage there will be a reward for the whole team afterwards

M it was more like the team had been doing poorly and having low hit percentage, and he would be like, ok this week, if you hit 70% of routines, we will skip a day of morning training

J do you feel like there were any other rewards used in competition, or do you feel there was a need to use a reward in competition more than john did?

M not necessarily in the atmosphere in the collegiate atmosphere that we are talking about because it is so team oriented, you didnt want to let your teammates down, so that in and of itself was motivation to make your routines

J so the team component that you experience at the collegiate level had a built in level of motivation to it that maybe you didnt experience at the club level. Were there any other specific types of rewards you can remember john using whether it be in training or in competition,

M not much

J how often to do think john used rewards in practices, how often were those games played, i know you said they were week long games, how often did you do those

REWARD-T  
HOW OFTEN (MF)

M we did that for about half of the semester in the fall semester, we did it 2 years in a row, so about 8 weeks, while i was there my last 2 years,

J so would you say that that means about 50% of the time in practice, you had a reward based motivation going on

M well no, itd be like 25%

J ok, so that half of the time, half of the season, so 25% of the time you guys were involved in this stuff

M yes'

J how do you think your coaches use positive reinforcement or reward affected your performance

REWARDS  
IMPACT ON PERFORMANCE (MF)

M i think it was very helpful when they were positive with me, you know i was more motivated to do well when i was getting positive feedback from them, so you're talking about positive feedback right there, not necessarily just playing those games, but the positive feedback as well as the reward, you feel the positive feedback had a positive effect on your performances

M yeah it started snowballing because when they would start being positive, i would start doing better, so then they would be more positive, because i would start to do better and better

J ok what about with the games, do you feel like those games impacted your performance in training

M they did

J we talked about wanting to perform well for your teammates, did that have a positive impact on your performance

M yes

J ok, tell me about the positive reinforcement thing, if you were to say on a scale of 1-10, 10 being as positive a person can get, where would you put john

HOW POSITIVE (MF)

M umm 6 or 7

J ok, and you felt like in the times he was being positive, whether he was putting you guys in the position to play the games, that was helpful, you also felt like when he was just giving you positive feedback that was helpful

M yes

J what was helpful about him just giving you positive feedback

REWARD  
POSITIVE FEEDBACK (MF)

M first it made me feel he was taking an interest in what i was doing, and noticing that i was trying so that made me feel important, it made me feel like i wanted to please him more.

J How important was that?

M well i never thought about it but it seemed to be pretty important because i noticed when i was getting positive feedback i would do better

REWARD  
POSITIVE FEEDBACK  
HOW IMPORTANT (MF)

J on a scale of 1-10, 10 being as important as something could get, just ballpark me how important

M 8 or 9

J how important were those games, how important 1-10



REWARD  
MOST HELPFUL (MF)

M oh i would say those games were the most important things we did while we were there

J even more important than the positive feedback?

M yes

J ok, did the reward based motivation impact your self confidence?

REWARD  
INCREASED SUCCESS  
INCREASED SELF CONFIDENCE (MF)

M umm i dont know if the reward based motivation did , um, my confidence started improving from performing better in competition, and i dont remember exactly when that kicked off. I dont know that it was necessarily the reward that caused me to feel more confident

J what about when john would give you that positive feedback, did that have an impact on confidence?

M that did

J how

M umm you know it just made me feel like i was, if either john or yoshi or the graduate coaches were noticing what i was doing and giving me a positive comment even if they were given me that positive comment, they were noticing that i was trying and i was improving

J so those positive comments, you said 2 things right there, trying and improving, it seems like one is effort based and one is performance based, when a coach would comment about your effort, how impactful on a scale of 1-10 was that in terms of improving self confidence

12:05

POSITIVE FEEDBACK  
EFFORT BASED  
IMPORTANCE (MF)

M is say i was about a 9

J in terms of when they would give you positive feedback about performance or ability? 1-10

POSITIVE FEEDBACK  
ABILITY BASED IMPORTANCE (MF)

M umm 7 or 8

J so effort based feedback was more helpful for you in developing self confidence than performance based feedback

M i would say so

Jok, lets talk about the games. When you would play the games, did the games have an impact on self confidence

M yes

J how

REWARD  
COMPETITION GAMES  
IMPACT ON SELF CONFIDENCE (MF)

M well they put you in a pressure situation, and if you were able to hit your routine in that sutatation, i felt more confident about what i was doing

J so the games put you ina position to improve your self confidence bc you were performing. It gave you a vehicle to perform well under pressure. What if you didnt perform well under pressure, how did that influence self confidence? Did it?

M i think it did, but it didnt have the same negative impact that performing well in that situation did.

J interesting, ok, how do you think rewards , whether it be playing the games or just positive feedback, how did those type of rewards effect your ability to imprive your skill level

M i dont know

J did it cause you to try harder? Cause you to try less?

M well yeah they obviously they caused me to try harder, i dont know, you know we were playing them pretty early in the season, so they were still pretty loose on what was a hit and what was a miss routine. So i dont know what to call that. It doesnt relaly help

SELF CONFIDENCE AND PERFORMANCE (MF)

J do you feel like self confidnece impacted your ability to perform. If your self confidence was high, what did that do to your ability to perform.

M if the confidence was high, then i performed better, i think everyone did. And then if our self confidence was lower that we didnt perform as well,

J would you make the generalization that this was the eway it worked for me and my teammates, when self confidence was high its easier to perform well, when low, its harder to perform well

M yeah

PUNISHMENT  
INCREASED WORKLOAD (MF)

J ok now ere are going to shift gears and look at how punishment affected your confidence. Did john use punishment with you in training

M not much, ummm, if we werent hitting routines, they would give us more routines to do during the week, in order to avoid that, we would try to do better

J ok,

PUNISHMENT  
IMPACT OF (MF)

M so we would try to hit more routines, i dont know that that helped me at all. Because i felt like when the numners started rising, i started trying harder to hit the routines so i wouldnt have to do 12 pommel horse routines in a week. So i would try harder and then i would put too much pressure on myslef, and i would crumble under the pressure that i was putting on myself

J when we talked about the rewards, it sounded like trying harder had a positive impact on your performance, but this one sounds like its different, it sounds liike trying harder almost goes into trying too hard

M yea maybe it was trying too hard or just puttin gthe pressure on myself, i would swing as freely or i wouldnt be loose when i was swinging, id tighten up and id be nervous up there.

J would you hae the same nervous when there was a reward base when you were playing the game trying to hit a goal>

PUNISHMENT  
QUOTE ABOUT IMPACT OF PUNISHMENT VERSUS REWARD (MF)

M well i think it was different with the game that we were taling about because i knew i had to give it everything i had and if i didnt hit the routine then it was ok, i had still tried as hard as i could. Its kinda like you aim for the stars and if you miss you still did a good job. When i was trying to avoid getting more routines to avoid the punishment, i dont know it was differnet, it felt like i was more dissappointed in myself if i didnt hit the routine

J and that dissappointed you feel like had a negative impact on you

M yeah

J k

M it wasnt just me that was dissapiinntdd, i could see that the coaches were dissappointed too

J tell me again, would you influence extra routines for your teammates, or was that individual

M individual

PUNISHMENT  
CAUSING PRESSURE (MF)

J and you still with the individual punishment feel more pressure from punishment. The pressure felt negative instead of positive, made it harder to performance

M yeah

J what about did john use punishmetn in competition with you

M no, the punishment was we wouldnt have a spot in the line up

PUNISHMENT  
NOT IN THE LINE-UP (MF)

J ok, so what would it take for you not to have a spot in the line up? Was it set before hand, if you hit a certain number of routines.

M you would know in practice, ,theres 8 guys fighting for 6 spots, and you hit one routine all week, and once everybody else is hitting 5 or 6 routines, you can figure out that you are not going to be in the linuup that week

J ok so how did that impact performances

M umm well there was a lot of pressure when those situations occurred. And it seemed to effect everybody so i dont know it was different for me during different years of my carreer, when i was younger, it made me hungry, and i wanted to get aftedr it and i wanted to hit the routines, so i could kind of stuff it in the older guys faces, when i got older, i didnt want those young kids to beat me, so i think ththose nerves came into play more

J what impacted your performance more, the threat of having to do more routines, or the threat of not being able to compete?

PUNISHMENT  
NOT COMPETING VERSUS EXTRA ROUTINES (MF)

M id say the theat of not having a spot on the teaem

J ok so that was more intense, the threat of not having a spot on the team, did thye both feel negative, meaning both made it harder to perform, or did it make it easier to perform when you knew you had to perform or you wouldnt be on the team? Did it make it harder for you to perform because of the threat of not competing or the threat of having to do more routines.

M ummm the threat of not competing made it harder for me, id say that made it really hard for me to perform'

J more so than the threat of doing extra routines,

M yes

J that pressure from potetnially not competeeing was more intense and made it harder fo ryou to perform than the threat of having to do more routines

*KEY COMPONENT: PUNISHMENT CAUSED PRESSURE REWARD CAUSE MOTIVATION*

PUNISHMENT  
NOTHING TO LOSE (MF)

M yes, until i lost that spot, that actually happened to me and i lost the spot, so i wasnt competeting for a coupldee weeks, and then somehtintg happened, and it was kind of that i had nothing else to lose, so i might as well give everything ive got. And i went crazy at that point, and started hitting routines

J so then when you had nothing to lose, the punishment actually impacted your performance in a positive way

M yeah

J when you had nothing to lose, and punishment was used, it affected you in a positive way, more so that competing, you know using the reward based stuff? What affected your perofmrance in a more positive way?

M id say the reward based stuff helped a lot, but for me personally, when i lost that spot on the team and wasnt traveling as a senior, you know that lit that fire under my ass, and i went from hittin gon eroutine a week to 11 routines a week,

24.42

J ok, and that threat of punishmet was present most times in practice?

M it kinda dependedon the year and who was good on certain evernts, umm you know my senior year it was present there most of the year

J what about other years?

M there was 2 years that i was not there and 3 years that it was there,

J and your senior year it was there most often?

M yea

J when it was ther emost often, give em a percentage of time of practices and competetion that that was an inherent punishmetn used for motivation

PUNISHMENT  
HOW OFTEN (MF)

M um about 80 percent of practices

J ok and the years it was lighter, what was the least you would say it was used

M um there was one years when there were only 6 guys who could do pimmel horse routines so no matter how many routines i hit i was going to competet

J in that year when it wasnt prestnt at all, in terms of getting a spot, how often would it be presnet when he would say you would do more routines in training? How often did that haooen when you werent hitting?

M probably 55 maybe 60 percent of the time that it did happen. You know there was always some point in the season when everyone would have a breaking point and they would start increasing the numbers.

*KEY COMPONENT: WITH PUNISHMENT "I GOT TO A POINT OF NOTHING TO LOSE" AND THEN THE PRESSURE WAS REPLACED WITH MOTIVATION*

J so you would say close to half if not a little more of the days you all would miss routines to a point of having to do extra routines

PUNISHMENT  
HOW MUCH (MF)

M id say a little less than half, so 40%

J so out of 10 dasys, maybe 4 days you guys would have to go through the punishment of doing extra routines.

M well if we werent hitting one week, the next week hed increase the routines by one or 2

J ok and increaseing those work loads definitely felt like a punishment to you

M yeah, and sometimes it was make a routine or hit a routine,

J do you think using the punishment affected self confidence

M umm for me it didnt, i always knew that if i was getting a harder assignment, than i was messing up

PUNISHMENT  
SELF CONFIDENCE  
IMPACT (MF)

J so thats kind of like in training, when he would use the punishment of extra work load, ,it didnt impact self esteem, what about the punishment of not getting your spot,k would that impact self vonfidnec

M yeah, well then you knew you just werent as good as everyone else on the team so you didnt deserve to be competeing, that hurts your confidence

J and then we talked about this, but there was a time when you actually lost your spot, your self confidence, and you said you had nothing to lose, how did that wokr, what happened with self confidence with that experience?

PUNISHMENT  
SELF CONFIDENCE  
IMPACT  
QUOTE (MF)

M i felt like i had lost a spot, i wasnt good enough to be in the lineup anymore, ummm and i said well im just going to go out and do my best, i dont know exactly what happened, i stoped putting pressure on myself because i knew if i missed a routine then it didnt matte, i knew all i coould do was go up from there, so i was just going to relax

J so the hinge seems to be the pressure as opposed to self confidence

M i think for me it was

J pressure impacted your performance more ina negative way , but self confidence also impacted it  
M um huh

PUNISHMENT  
SELF CONFIDENCE (MF)

J when you were competing, when you ahd a spot, where do you feel your self confidence was?

M when i was hitting routines in competition it was 80-90 %, when i was missing it was down around 40% .

J and when you had th eexperience ofnothing to lose, where was your self confidence then?

M well that week i lost it, it dropped down to 0, and i did some thiking that weekend, and i dont know,

J after the weekend of thinking, wehre was self confidence

M it wasnt very high until i went into the gym and started banging out routines,

J and then immediately self confidence started to rise?

M yeah it went to like 95%

J so self confidence was rising after punishment put you down to 0

M yeah

PUNISHMENT  
ABILITY TO IMPROVE  
TRYING HARDER (MF)

J how about do you think punishment affected your ability to improve skill level

M ummm to some extent because if you look at the punishment of not making the lineup, you knew you had to have harder routine to be in the lineup, so you wanted to try harder to get those skills,

J ok so it was effort based, it pushed you to work harder to improve your skill level

M yes

J it feels like the pressure of punishment though, impacted the ability to perform in a negative way

M yes

PUNISHMENT  
VERSUS PRESSURE  
QUOTE (MF)

J punishment pushes you to work harder, pressure impedes your ability to performance

M yes for me

J do you use reward based motivation with your athletes

REWARD  
FREE TIME  
APPROVAL (MF)

M yes i reward them with free time or i give them a lot of praise when they are successful or when they are trying hard, so i don't necessarily give them anything other than my approval

J ok so you reward them with praise and free time

M right

J why do you give the rewards of praise and free time and some of the other things you do

M it gives them a short term goal to work towards and it gives them motivation to work harder during that practice in order to achieve that goal

REWARD  
INCREASED EFFORT (MF)

J do you feel like the reward based stuff you do increases their effort levels

M yes

J how do you feel like it impacts their ability to performance

M umm well it does help when we are doing routines it helps them perform and i dont know give that little extra in routines when they know there is something on the line

REWARD  
EXTRA EFFORT (MF)

J do you feel like using reward based motivation is helpful in terms of improving effort and ability in practice?

M yes

J what about it competition

REWARD  
COMPETITION VERSUS PRACTICE (MF)

M yes, but, i feel like it is more productive in practice than in competition

J ok, do you use punishment with your athletes,

PUNISHMENT  
INCREASED WORKLOAD (MF)

M i try not to. I really believe in the power of positive thinking and i try to stay positive with them

J do you find yourself using punishment with the athletes

M i do

J what types of things when you do?

M i dont even know, i give them pushups if they are not on the equipment enough time, if they are messing around one day and not putting much effort in, occasionally we will do harder conditioning

J have you found ways that using punishment actually helps, whether it be with effort or ability

PUNISHMENT  
CAUSES ANGER  
EFFORT (MF)

M not necessarily Jason, or not that i can think of off hand. I know that when they see me angry, or when they see me get angry, they dont like it, so they try to do whatever they can to not make me angry

J do you see that that helps with effort?

M yea that does help with effort

J and what about ability, when you are angry and they know it, do you notice a significant change in their ability to performance



M not necessarily

J im wondering if the experience is somewhat the same that they try harder, but the pressure is increased, so their efforts to try harder are handicapped a bit, thats what your experience was?

M yeah

[Shannon Welker \(SW\)](#)

J: Let's just kind of think in terms of CJ. Tell me about the type of motivation he used. What do you think worked, what do you think didn't work and why. A very general question to start.

POSITIVE REINFORCEMENT  
WITH MEDIOCRE OR AVERAGE (SW)

PUNISHMENT  
WITH HIGHER END ATHLETES (SW)

S: Well I think CJ typically went with the positive reinforcement method. At least with myself. I thought it was good and I thought it was effective. To get me to be a mediocre or average athlete, but we had ah...I think the punishment method works better at certain times especially with your higher end athletes. Because they need to be challenged and positive reinforcement is great to a certain degree or at certain times or more of the time I think, but at certain points I think CJ should have used a little more what we would call maybe negative reinforcement of the punishment type style. So.

J: Okay, let's hold that thought. I wanna focus on reward-based or the positive reinforcement based stuff first, but I want to come back to that okay. Let's talk about the reward or positive reinforcement as you call it. How, what did he do, what do you remember him doing in terms of positive reinforcement during training?

(1:47)

POSITIVE REINFORCEMENT  
LESS WORK LOAD (SW)

S: Um, positive reinforcement type coaching style CJ used...we probably would, I remember getting, you know if you hit a certain number, your assignments were lessened. You know, if you perform well for a certain number of routines, or the first routine or the second routine, if you do a certain number as an individual, of course if you ? or if your hurt or your lineup did well on a certain event, the first round the urge assignment was lessened. Um, so we did a lot of situational stuff like that, which I thought was helpful and was motivating, especially in the running part of the season.

J: Okay, in practice you can remember CJ quite often, if you guys were hitting routines, whether it be individually or as a team, the workload would be lessened as that was viewed as a reward.

S: Yes, that is correct.

J: Okay, are there other things you can remember? Did he do any chart stuff? Or did he give you guys things? Did he take you guys out to dinner when you hit routines? Is that the extent of what he used in training?

(3:04)

POSITIVE REINFORCEMENT  
DINNER  
GOALS  
PROGRESSION CHART  
LESS WORK (SW)

S: Well we certainly, I certainly remember, it's been a few years, but I certainly remember a competition, or following competition, if we did a good job at competition and performed well, I certainly remember being able to go out and have dinner. I don't think that was an incentive on the front end, but that was certainly a reward on the back end. That was quite obvious. You know, other things during competition or in practice, we'd certainly focus on a number routines that we'd want to get through for the week and we'd certainly track those. It was certainly tracked, a number of hits of routine in a competition then we'd set goals for those competitions and keep track of them in a progression chart for the season. So you know through the season what you're shooting for. For example, 70% of your key hits, and by the end of the season we were looking for that 85-90% hit rate from a routine. And if we hit those, we certainly got the benefit of the doubt the following week, the week's practice load.

J: Okay, the majority of the reward felt like the lessened workload.

POSITIVE REINFORCEMENT  
LESS WORK  
NICER MEALS  
NICER TRAVEL  
NEW EQUIPMENT  
FINANCIAL SUPPORT (SW)

S: Yeah, I would say a lot of it, the reward was a lessened work load. And it was obvious that we did get the benefit of being rewarded and going out and eating at nicer places, and you know, I felt like CJ...if we were doing well, and you know there were certain years where we did well or better than other years, and I certainly felt like he would go out on a limb to get us whatever we needed, more so whether it be nicer travel, or nicer dinners, or equipment-wise at the gym, versus years where we underperforming.

(5:11)

J: Okay, and did it feel like those, for lack of a better language right now, I'm going to call that financial support. The nicer dinners, nicer equipment, nicer travel—did you feel like that was basically a reward for doing well in competition or training or both?

POSITIVE REINFORCEMENT  
FINANCIAL SUPPORT  
INCREASED SELF CONFIDENCE (SW)

S: Um, I would say both. Um, I would say both. And I don't think that that reward so much led us to do a better job in competitions or practice, but I think the result was that it made us feel like we were deserving of winning because we were gaining the same benefits that other teams were getting that were teams traditionally in the passed that beat us. So I think that's where, and I think it was more of a psychological reward in that respect. And I don't think any of those teams cared too much honestly, to stay in a nicer hotel, or go to a nicer dinner, but I think that made us feel as if we were as good as any other team out there, thus translating into, you know, a more confident attitude going into competition.

(6:33)

J: You know, that's a very interesting concept. Do you ever remember people talking about that, or was it just kind of this unspoken thing you remember feeling. Or do you know of teammates that talked about that? Do you remember them saying, "Hey, we're being taken care of here, we are as good as anybody else," and so like helping with that confidence level?

POSITIVE REINFORCEMENT  
EXTRA PERKS  
JOBS (SW)

S: Ahhh, do you know what? I don't remember anyone talking about that. I think everybody just knew that that's, it was more of an unspoken thing, of 'hey listen, don't think you're spoiled.' And I think everybody just knew that. You know in hindsight, talking about it probably would have been a good thing—a little bit of a reality check, but no, there was no conversations with teammates about that. Maybe the top tier guys talked about it a little bit. But we certainly did get, CJ definitely helped us with other aspects. You know, maybe things that were, could be construed as violations as well you know, maybe for him, but setting us up with jobs and stuff like that over the summer. So you know, you get your perks that way as well. And if anyone tells you they don't get those extra perks, then I think that's probably untrue, so, but we would get those things as well. And I don't think as individuals, and I don't think that that was in the forefront of your mind, but that as certainly, you know a reward that you get could get or help out with super classes or CJ'd go to bat for you.

(8:41)

J: So do you feel like those things happened because you trained hard or did well in training and/or did well in competition?

S: Certainly.

J: Okay, I want to go back to that psychological benefit. You seemed to, even though it wasn't something that was really talked about, you seem to have a confidence that it really did sink in with everybody. Does that seem accurate, that "hey, we're being taken care of here—we are in a position to compete with anybody?"

POSITIVE REINFORCEMENT  
FINANCIAL SUPPORT  
SELF CONFIDENCE (SW)

S: Sure. I think that those two things go hand in hand. Obviously I think doing well in competition, CJ appreciated that slightly but I think that once that train went rolling, it certainly made a difference. Because we as athletes certainly talk to other teams about, you know, and we see how they're treated and how they travel—things of that nature, and what type of deal—you know, we go to competition and one team is doing a bunch of warm-ups and another team is, just looks like they're going to be ?, then certainly you notice that stuff, whether he wants to or not. You know, a lot of that stuff, I mean, I think it seems like there are teams that are slightly less talented but have a bigger budget that can get a lot of perks, I certainly think that gives a psychological edge over a team that is possibly a little more talented that has less of a budget I think that's certainly a psychological effect that goes on then and again now as I coach in this gym, so.

(10:25)

J: Okay, um, well this makes a lot of sense, and it's a really interesting point too. Let me ask you this, in terms of reward, how often do you think CJ used reward whether it be some of those lessen workloads or some of the financial perks that we talked about—how often was that happening if you can recall?

POSITIVE REINFORCEMENT  
LESS WORK LOAD (SW)

S: Um, I think a lot of that went honestly I think on a weekly basis at least on the lessened workloads. And it depended as well on what portion of the season you were at as well. I don't think you got the lessened workloads early on in the season or on a preparation period or on the first month. But you certainly did get that lessened workload toward the latter half of the season or once you entered the post-season period. And honestly you needed it at that point time and to earn it was a lot tougher at the time as well. So, um, in the standards of what was, you know, obviously a lessened workload towards the beginning season was, you know, the standards were less than at the end of the season. Because you know at the end of the season you're looking for the area based on quality—much more quality than you are quantity. At the beginning of the season, we're looking at a little more balance between quantity and quality.

J: So expectations rose as you started to peak the season. And let me ask you this, and I know this is probably tough, so just give it the best you can, how often over the course of the season, let's look at a percentage here, how often over the course of the season did CJ put you in a position where you knew if you did well there would be some type of reward whether it be a lessened workload or some of the financial perks?

(12:19)

POSITIVE REINFORCEMENT  
LESS WORK  
20% (SW)

S: You know, it was probably a once a week type thing, so if you slip that into five practices...you know let's just say you had five practices a week which is typical, um, you know, you're probably talking I would say around 20% of the time there were...once, how do I put this? About once a week, if that makes sense, out of five practices, there was a point where he said, "Listen, if we get this done today in a group or as an individual, and then we'll cut back on this day, or have a shorter practice on this day or something like that."

J: Okay, that makes sense. Okay, how do you think the use of that positive reinforcement or reward effect in performance? Your performance. How do you think the positive reinforcement or reward effect your performance?

POSITIVE REINFORCEMENT  
LESS WORK LOAD  
COMBINED WITH LOW EXPENDITURES (SW)

S: Um, I thought it was effective. I think it helped me stick routines. I thought it was good to a certain degree. I thought the, the problem I had with it was that I thought the expectations were too, when we applied it in a group setting, that increased workload, I thought the standards were too low personally.

J: What about when it was just individually based at you?

S: Then again, I thought probably individually-based, the standards were a little low.

J: Okay. Let me just ask this while you're talking about it here. You said about 20% of the time he used reward. How much of that, if you were going to break that 20% down, how much of that was individual and how much of that was team?

POSITIVE REINFORCEMENT  
TEAM VERSUS INDIVIDUAL  
LESS WORK

S: I would say about 5% of the time was individual and about 15% was group based.

J: What do you think was more effective for you?

S: Personally I thought the individual was more effective for me.

J: How come?

#### POSITIVE REINFORCEMENT

#### LESS WORK COMBINED WITH LOW EXPENDITURES (SW)

S: I had a hard time, well, about hitting routines, I thought that was pretty easy, I just thought, because I thought the standards of what we considered a hit or what was considered acceptable, were lower than I wanted, then it didn't mean as much to me. You know I don't think, I thought the concept was good, but the application wasn't as good. So as far as what was acceptable standards for a hit and what was not. But when we did the individual one, at first I was say, "alright, well what does that entail for me?" And then again I would always help with—I would say, "Alright, well that means then I've gotta do the routines with very specific things that I knew were problem parts or parts that I knew would put me ahead of other people, so I would say, "this is what I need to get done in this routine if we're going to count this." You know, as a hit for me. I had a little more say in the quality of the hit when it came to my usual performance.

(15:47)

J: Okay, so you felt like even by your own efforts, the expectations individually were higher than the expectations of the team?

S: That is correct.

J: And that made it more effective. Okay, that makes a lot of sense. Okay, um, how about, let's talk about reward. Did it influence your self confidence at all—having that reward based motivation?

#### REWARD

#### CONFIDENCE (SW)

S: I don't know, individually I don't think so. Individually I'm not so sure it did. I think if anything it, I was more concerned about my team's performance, I was more worried how my team would perform versus myself. I think I was always confident personally going into competition. I was more concerned with, because it is a team sport and you can only do so well as an individual, and it doesn't matter, you know you add up points and if your team isn't in that frame of mind, or that frame of mind as yourself. I think I was more concerned with, you know, the team's confidence. Because I always, 99% of the time I always felt like I was going to do great. So I think that maybe what I was more concerned about was not so much my own confidence—I don't know if I needed that so much personally. But maybe more so how it was effecting my team, which it did seem to be an effective tool to a certain point, you know whether it be...yeah.

J: So you felt like the reward did help with the other guys on the team's self confidence and that was important to you because you were hopeful that their self confidence would be higher?

S: Well when they did better, I got to do better. Because there is the score-building and things of that nature. It means, if your team is doing better, obviously you will move deeper into the post-season. And as an individual, it means you have a better shot at being successful. It's just because your team is there.

J: Okay that makes sense. One more question on the reward side of things. Do you think, or how do you think reward effected your ability to improve skill level?

S: Will you repeat that question?

J: Yes, how did reward, how did CJ's use of rewards effect your ability to improve your skill level?

(18:38)

#### REWARD

##### ABILITY COMBINED WITH LOW EXPENDITURE (SW)

S: As an individual, I think that's what you're asking here, I would say...man. I honestly don't know if it was that effective because the reward was based on, you know in a group setting, as a team reward, it was pretty much you know, you hit your routine and that was it. And the problem with that is that for some of us, the routine was below what some of us were capable of doing. So on an individual skill level, it really didn't push us that much. There's definitely a different in the athletes on your team, and their standards—their abilities. You know the problem was, I feel like he pulled people toward the middle, the median, versus exploiting you know your great athletes in addition to helping maybe average athletes. So you know for the people who were on the high end or had a higher skill level, I think he pulled them toward the median. And the people who were below that were pulled up to the median. But in retrospect it pulled us back.

J: Do you think that was based on his, for you in your case, one of the athletes on the high end of the spectrum, was that based or was that happening because of his lowered expectations?

S: Lower expectations as of what?

J: Well it sounds like his expectations for you were lower than what you felt could have been effective in terms of pushing you?

S: I felt the expectations for the team weren't too low, but I felt that translated into expectations for myself being too low.

J: Okay.

##### QUOTE ABOUT IMPORTANCE OF EXPECTATIONS (SW)

S: I think any athlete, I don't know, I'm not sure, but I feel like a lot of high-end athletes, they have high expectations for themselves and typically higher expectations than their coaches. I think you're getting into a really nice situation when the coaches expectations are slightly ahead of the athlete's expectations, or very close to. Those are the types of situations where I feel like an athlete can really be successful. If an athlete has a great deal of ability, and the coaches expectations aren't actually as high, it's just tough. I think you can see some regression in that athlete or they don't feel like they did what they could have or would have.

(21:48)

#### PUNISHMENT

##### INCREASED WORK LOAD (SW)

J: Okay, that makes sense. Alright, let's shift over to looking at some of the punishment okay? Did CJ use punishment with you in training, at practice?

S: Sure. And you know on the flip-side of that, you know, when we did well, workload was lessened and if we didn't do well, workload was increased in practice. In practice and certainly in competition if we didn't do well we didn't get the perks. We didn't get the nice dinners a lot of the times, or you know some of those things were pretty obvious things that he used as punishment.

J: In, you talked about in competition you would get the perks. Would you go below your normal standard, or would you just not raise up to that higher standard?

S: Um, we would just not go below, most of the time I would say we would get the nicer dinner—we wouldn't go below our normal standard.

J: Okay, so back to training. Are there other things besides an increased workload you can remember him using as punishment?

PUNISHMENT  
EXTRA PRACTICE  
EARLY PRACTICE (SW)

S: Well we had some early practices, certainly if a certain group or a certain event didn't do well, or the whole team. We would certainly have extra practice times and we would come in for practice very early in the morning. Some of that was certainly more of a thing that was used as a punishment.

J: Okay, in competition do you remember if you guys had a particularly poor meet, other than not getting those financial perks, do you remember CJ laying into you guys with punishment?

PUNISHMENT  
VERBAL (SW)

S: We, well, we would certainly take a berating at times from CJ. I'm not sure of what other types other than the verbal, the verbal abuse, well not abuse, but verbal punishment—I'm not sure if there was anything else he could do at that point. But that's all I remember as far as if we had a poor competition. Yeah, we would certainly get spoken to.

(24:20)

J: Do you remember viewing that as punishment? I mean if he would be, I'm assuming when you say "spoken to" we could call that "yelling at" "screaming at"? Do you remember him doing that as punishment?

PUNISHMENT  
YELLING AT TEAM WITH INDIVIDUAL DID WELL (SW)

S: Well the problem I felt was, and I don't mean to put this in an individual basis, but the problem I felt was you know 90%, 99% I was doing or exceeding what my expectations were set, for my expectations for the gym. So when we would get yelled at, I really almost felt like it was the rest of my team that he was addressing, because honestly I had very few poor meets overall. So, you know a lot of the time I had a hard time—I think another teammate might have felt the same way—you know we would put in the extra time and exceed expectations at the gym on a weekly basis. So I had a hard time feeling like, "okay, this is directed toward me." And even more so it was obvious that it was directed to the certain guys that weren't pulling their weight.

J: Okay, I'm just curious. With that situation going on, meaning that when the punishment was leveled, it seemed that it was more because of your teammates' performances being poor, how did that affect you?

S: You know it was very frustrating, honestly. And as a matter of fact, I wanted to transfer like after my sophomore year. And I even addressed that issue with CJ. And at that point, he would signed my papers and let me go. So it definitely had an effect on me, and honestly I think after a point of trying to pull my teammates along and at certain points, I think the latter part of my career, I was somewhat self-centered as far as I'd been trying to get this to work with my team for a long time and see what we needed to be better. But there were certain punishments that weren't working and the expectations were a little low, so it really made me try to focus a little bit more on myself kind of as a defense mechanism. So it wouldn't be as frustrating when the team did poorly.

(27:03)

J: Okay. Remember we talked about and I asked you how often you think rewards were in play. Let's talk about punishment. How often do you think this punishment was used whether it be in training or in meets?

PUNISHMENT  
NOT USED ENOUGH

5%

NOT FOLLOW THROUGH (SW)

S: Not enough. Not enough. I think there was a lot more talk about the punishment than there was actual follow through. So you know obviously that translated into it not meaning as much when there was just talk about it. All talk and no follow through typically ends up in not very effective, not very believable. You know when the coach says certain repercussions are going to take place and certain things happen. Um on a percentage basis I would say maybe 5% of the time.

J: Okay. And just talk if you will for a second about that concept right there you just brought up. I think it's a really interesting concept. He would threaten punishment but wouldn't follow through. Why do you view that as not very positive, not very helpful?

PUNISHMENT  
NOT ENOUGH (SW)

S: Well, it's very similar to being a parent nowadays. There's always consequences for our actions. We learn that as we grow up, as we're going to school, what your parents, but now all the sudden there's actions but then there's no consequences. Again the problem was, if there were good actions, then there wouldn't be any good consequences. Problem was, that a lot of the times there'd be poor actions and no consequences. So I think that rendered the punishment pretty ineffective. You know and it did happen every once in a while, about 5% of the time, when you know it's 5% out of 100% you know your changes are pretty good of not incurring any punishment then. So it rendered the whole thing pretty ineffective.

(29:31)

J: I'm just curious here too. If you would give CJ advice on this, how much would you tell him—what would be the ideal percentage if you will of using that punishment?

BALANCE OF REWARD AND PUNISHMENT (SW)

S: I personally feel like they equal at the gym in positive reinforcement, I think the numbers should be pretty close to whatever you feel like you need to give in negative as well. I feel like the good athletes, the athletes you want out there on the floor, and obviously all athletes are different and you have to approach it differently with each one, but I think the kid that you want the floor competing for you are kids that can handle that—that negative and positive. And again, you know I think that was part of the problem. And a lot of times you're developing that, especially at a major school. But I think you just have to adjust to where you are. So I think an equal distribution of that is good, maybe slightly more of the positive, but certainly very close.

J: How do you think CJ's use of punishment...???????

PUNISHMENT  
LACK OF FOLLOW THROUGH  
NO IMPACT ON SELF CONFIDENCE (SW)



S: I personally didn't think it had any effect because it was rendered a little bit useless. Because there wasn't a lot of follow through and so the problem again I thought translated into my teammates not taking it seriously.

J: Okay. How do you think your coach using punishment affected self confidence?

S: I find it could have been good, but again with no follow through, it really became null and void without follow through. But I don't think we saw the effects, honestly. I don't think we were able to see the effects of the punishment on a consistent basis enough to really evaluate what was effective with self confidence and what wasn't effective with self confidence.

(31:53)

J: I want to ask this: it's an interesting situation because there was so little punishment follow through at least—do you think, do you think more punishment—how do you think more punishment would have affected your self confidence? No, no, I don't want to ask that question. I want to ask this question: do you think the little amount of punishment impacted your self confidence in a negative way?

S: Personally, no. I don't think it affected my self confidence.

J: So either way. So, you didn't feel like you had a lower self confidence because there was a lack of punishment?

PUNISHMENT  
NOT ENOUGH  
LOWERED SELF CONFIDENCE (SW)

S: Well, let me rephrase—I think each individual, and I think it's impossible to say that...um, I certainly think it did effect my self confidence in the fact that I knew that my team needed, they needed the punishment and they didn't get it. So it's hard during the event to go out as individual in a team competition to ever feel satisfied when your team isn't doing well. So in that respect, I felt it lowered self confidence.

J: But that's—and again you're bringing up very important, kind of an interesting concept here, but it wasn't necessarily your own self confidence about your performance, it was your self confidence about the team's performance. Is that correct?

S: That is correct.

J: Okay, alright. How about, do you think the punishment effected your ability to improve? Let me ask it in a different way: how did punishment effect your ability to improve your skill level?

PUNISHMENT  
NOT ENOUGH  
LOWER SKILL LEVEL (SW)

S: I think a few things: I don't feel like it had a huge impact on the ability for me to improve my skill level. It maybe negative impact because there was no follow through.

J: Okay, so your initial thought is it didn't have much of an impact because there wasn't enough punishment. But if there had been more punishment it could have been a benefit to improving skill level?

S: Certainly because I think if people around you do better, you do better.

J: Okay, now I'm going to shift to talking about you as a coach. What things you endorse now—not what happened to you as an athlete, but what you do, or what you believe in as a coach. Would you or do you use reward-based motivation with your athletes?

(35:18)

S: Certainly.

J: What types?

REWARD  
ATHLETE SPECIFIC EXPECTATIONS (SW)

S: Let's see...we'll certainly do reward-based, we'll definitely use, there's one that I use, one that most coaches use, but that is certainly one that I use, and I'm very description about my reward-based workload. We certainly, if I have some expectations about the athletes, I am very specific about what I want each athlete, not just as a group. So I'll certainly do stuff by doing individualized for kids on certain days, and I'll do it in a group on certain days for kids. But the expectations have to fit the athlete and I think that specific, being very specific about your expectations and the athlete depending on their—what you feel like their ability is a key to that reward.

J: Okay. And why? Why do you think it's important to use it, and why are those specific expectations important?

REWARD  
QUOTE (SW)

S: I think when we use the reward-based, I think what you're doing is referencing the competition in a lot of ways. Because if the team does well, and I guess we're talking about practice, but we do it in competition as well, but I think it's more utilized at practice, but when you have an expectation and you set it out and let the kid know, "This is what we're trying to achieve and this is how I expect for it to be done, and if you do it, then you get this—this is a reward." I think that very much so replicates competition. Because if you do that, if you do what we're talking about in practice in competition, then typically the result is you get some type of reward. Whether it's winning a meet, or some other kind of reward. So I think there's obviously a close translation to what you're doing in practice and simulate that the reward is something you get by winning a competition or performing well in a competition.

J: Okay, so let me ask you this. How often do you put your athletes, and again let's look at percentage-wise here, how often do you put your athletes in a position to experience reward-based motivation?

(37:45)

REWARD  
HOW MUCH  
20% TEAM, 20% INDIVIDUAL (SW)

S: You know again, it's very, I probably do it once a week, so maybe 20% I'll do a team-based thing a week. And again, I think it's probably around that 20% mark, but I'll also do it individualized about once a week as well. And I'm taking this off of five day practices a week, which is what most students are utilizing. And we're talking about probably during season as well, because it's different at different times of the year. SO probably 20% in a group we'll do a reward-based type thing, and then 20% of the time I'll do an individual, like a specific-to-the-athlete reward like thing.

J: Okay, sounds great. Now let's talk about punishment. As a coach, do you use punishment with your athletes?

S: Sure. Absolutely.

J: What types of punishment?

PUNISHMENT  
INCREASED WORK (SW)

S: Certainly we use, probably very similar of what CJ did. We did laps after practice if we need to as punishment workloads obviously would be increased. Those are probably the mean punishment-type things that we use. And obviously not being the head coach, I have some limitations of what I am able to do reward and punishment based type things.

J: Why do you use the punishment?

PUNISHMENT  
QUOTE (SW)

S: Good question. Because I think there's a point where the higher end athletes, the kids you want to have on the floor, the kids you need on the floor, then you know that if it's very similar to competition. I think they gotta know, "hey, if I screw up at practice, or I don't perform up to my ability in practice, the likelihood of me doing the same in a competition is very unlikely." So I want them to know that, "hey, this counts in practice just like it would in a meet, because if we don't perform well in practice well here's a negative result." The same thing that happens, we have to replicate that, you know that same thing replicates in competition. You know if I perform poorly the likely outcome is that my team is going to lose or I am going to lose. So I want them to experience both ends of this. And say, "well, I did this, I did that, I did this." SO they need to know that that is the result.

J: Okay, that makes sense.

S: I feel like...

J: You feel like what?

PUNISHMENT (SW)

S: I feel like they know that, but they need to be reminded of that. And they need to be reminded that we're not just here and have a scholarship and we just do this. I mean this is a job, and you need to do it. Just like any job, if you perform poorly, there are outcomes. And I think sometimes the kids need to be reminded of that.

J: Let's again look at the percentage of how much you're using punishment.

PUNISHMENT  
BALANCE  
20%, 20% (SW)

S: I would probably, I feel like it similar. I try and keep it even with the negative and again, the positive. It's probably slightly less than my positive reinforcement, but on an individual basis...I think on an individual basis it's probably pretty similar—about 20%. I would say on the group, probably a little bit less, probably a little more set in the 15% range, probably closer to 10%.

J: Okay, so with individual 20%, and 10-15% with the group.

S: That is correct.

J: Alright, that's perfect, that's all I have.

Peter V (PV)

J were you aware of the terminology aversive control and positive control

M I understand reward versus punishment

J would you agree that both are prominent practices?

M absolutely

J which one would you say is more prominent at the elite level?

POSITIVE VERSUS AVERSIVE  
WHAT HAPPENS MORE (PV)

M I'd say that positive is more present than aversive, in some cases at the lower level, there is more aversive, bc there are some coaches that think that will do well. But by the time you are an elite athlete, you've been around for awhile, so you take more control of your training in a partnership with your coach, so pretty soon, my coach didn't need to motivate me, bc I was already motivated. So instead it was, what can we do together to improve my performance

PUNISHMENT  
YELLING  
NECESSARY AND EFFECTIVE (PV)

J so when you were younger, were you aware of pos and aver with your coach

M yes, but for the most part everything was positive. The first time I experienced aversive bc I chickened out in the middle of a handspring. He yelled, don't you ever do that again!!! And he never raised his voice like that again. When you hesitate, that is a chance of an injury. Everytime he said go for it, I trusted him, that he knew I could do it. I was 12

J that was the first time you heard him raise his voice. What do you feel like is the most appropriate way to motivate?

REWARD  
MUST BE HONEST (PV)

M I think positive control, but Ive seen coaches that are like "everythings OK", and sometimes everything is not ok. You know if you are not doing something correctly, you've got to change the behavior. Never sugar coat things. But it wasn't aversive, we never had that if you don't hit this, give me 50, or anything like that. But you consider the raising the voice to

PUNISHMENT  
ANGRY COACH (PV)

I respected him. I knew from day one that he had credentials, so im going to listen to him. So when he got mad at me, he meant it. \

J Are there appropriate times to use aversive control?

PUNISHMENT  
ANGRY COACH WAS RARE ENOUGH TO BE EFFECTIVE (PV)

M I thought it was appropriate that day, but if he yelled everyday in the gym, I would become numb to that form of communication. We worked hard, but when anger came, it was so rare, that you know he wanted to see some behavior change.

J ok so bc it was so sparse, thatmad it more impactful

M yes, one day I was late, and he was very upset, and I was never late for a workout again

J and you would consider that to be aversive, him raising his voice?

M to me that was punishment, bc I admired him so I wanted to be worthy of his respect

J are there things that aversive control would be more appropriate efor

PUNISHMENT  
WHEN IT'S DONE IN FUN (PV)

M well if its done in fun, AWWW you're late, ytuve got to climb the ropes, and we have fun with it, and the rope climb is good for you physically. And I thought that was ok

J are there times when aversive control would not be effective

PUNISHMENT  
CREATES FEAR AND REDUCES RESPECT (PV)

M yes bc over a long time it create fear and it reduces respect, In my opinion my coaches brother used a lot more fear, and I was afraid of him, but I could tell that they kind of butted heads a little, but he would coach me sometimes, and he was oppressive, and I didn't enjoy workouts under him, and I don't mind hard work, but he would never say last one.

J was that aversive control?

M I thought it was bc I felt like I was maturing as an athlete, and I didn't understand how it could help me, but I was a very dutiful student, and I used my fathers example to never complain, so it turned into manipulative

J so do you think if there is aversive control that is good for me, would that make it ok, if the punishment is good for you

PUNISHMENT

REACHING GOALS

RESULTS DETERMINE EFFECTIVENESS (PV)

M I think the whole point of being an athlete is to reach that final goal, and if this coach got me there, then I think aversive control is good without damaging the relationship, like I feel badly when I see athlete and coaches splitting up bc I worry about relationships over time.

J ok so lets focus on aversive control and relationships, how does having a relationship affect the effective or ineffective use of aversie control.

PUNISHMENT

CREATES TENSION

QUOTE (PV)

M I think that aversive control leaves more tension in this relationship, bc instead of saying what effort will it take, but what punishment am I avoiding to get here, does that make sense, I think it can inhibit the relationship if its used to much. I had dinner with bobby fields, very kind softspoken guy, I asked, youre a football coach at a university, do you yell? Bc ive been to a couple practices, and he said, I grew up in a farm in texas, ad we moved next to train track, and the first night I flew out of bed, but then I got used to it, if you should all day everyday, players aren't going to notice,

J so are we talking about the appropriate balance, but we have only talked about aversive control as yelling

M right, cause I never had punishment,

J did you see other athlese who weren't as coachable?

PUNISHMENT

YELLING

ONE ON ONE TALK WITH COACH (PV)

M the punishment usually came as a sit down heart to heart with the coach. So we didn't have things like that, there wasn't any sort of list of consequences for every negative action in the gym. I mean the coach got mad, and he yelled. He would sit us down and talk to us, but I would think, but I wasn't doing it, I was working hard

J was there any time when you weren't working hard, and you got a lecture,. Did it help you in any way

M thwere was a huge contrast between my coach and his brother, he's got brilliance in him in understanding movement, but his coaching method wasn't nearly as effective as his father

J but its almost like you had the experience of having an aversive coach and a positive coach

PUNISHMENT

OPPRESSIVE (PV)

M yeah, but aversive to me is more like oppressive, bc that was my experience.

J we are trying to figure out how to balance between positive and aversive, so you are saying use it sparingly, only when really necessary, and use it when the consequence is a benefit to the athlete

M right, you are articulating it in a way that I would like to articulate it.

J How much, is there a formula>

PUNISHMENT

DEPENDS ON EACH ATHLETE (PV)

M there is not a formula bc it depends on the athlete, some people need more negative or more positive. Some coaches need to give one guy a little more of one than the other, my coach followed the situational leadership model. In the beginning im enthusiastic, when you are told everything to do, buit you get better, and you almost need to be unmanaged. And he could stand there and say nothing bc I was having a good day

J what if you weren't having a good day.

M well then he would say , lets try this. It was a partnership, so it was always, let's do this..

J can you recall a time, when it had changed to more of a partnership?

INTERNALLY MOTIVATED

NO NEED FOR PUNISHMENT (PV)

M I think by the time I made the senior national team, the summer after my senior year of highschool, I showed up and made the national team, and I decline. My coach and I made the agreement and I declined, bc he wanted me to do international . the next year I placed 13<sup>th</sup> again, and I wanted to be moving up, and we were disappointed, but the trials are coming up in 4 months, and you can make this team. I was obsessed with being able to tell my coach that I worked hard every day. Next year, I was first all around. So he never had to say, stop talking, stop goofing off.

J so what happened was external motivation when applied appropriately, becomes internal motivation, but

HONESY AND TRUST (PV)

M yes but you have to have trust with your athlete, you cant say something that is not true to your athlete, bc your athlte wont trust you. He would never ask me to try a skill unless he knew I could do it. Every time he asked me to go for it, he was right, so there was trust there. Now where I really started to have a little question, was when he said, I think you can win the all around, and I was livid, bc he is freaking me out, I was top five, but win the all around, and then is he going to be disspointed when I don't. for a couple days, I mulled over that. I kind of wish I would have believed him earlier, bc I lost my .... Points, so I think back, man should I have blieved him earlier

*KEY CONCEPT: NATIONAL TEAM MEMBERS SEEM TO HAVE A HIGHER LEVEL OF INTERNAL MOTIVATION AND CONFIDENCE.—LESS NEED FOR AND IMPACT OF PUNISHMENT*

J ok so honesty brings out this relationship, so that is another of the important piece of the application of positive and aversive control. If a coach is overly or inaccurately positive, then that is not effective

M yes and it is a disservice to the athlete, you want people to say, I reached my potential in life, I love that having that influence that I learned over the years, bc a lot of kids and ucla, if you could see our gym, it was so motivationg, and a lot of those kids never made the Olympic team, but they will look back and say its worth it.

J so when your coach said you can win the all around?

M so I thought to myself I could, what if I screw up? I was scared to death

J if we had to get a number for the effective balance that we could generalize to the population of aversive to positive contirl, knowing that some will require more or less

M like a ration?

J yeah, positive to aversive?

M see the problem is i cant pin that down, bc my reallionshihp with my coach was pretty positive, so your asking about elite level athletics,

J when does a person need aversive control?

PUNISHMENT  
NEEDED WHEN WHAT THEY HAVE ISNT ENOUGH (PV)

M when theyre psychological MO is not enough to get them where they need to be in the sport

J ok, so give me some examples

M if they are hot in cold, and they have problems getting motivated on a bad day

J so maybe you are saying when an athlete is not giving 100% effort?

M yeah bc how do you give positive feedback when a guy isnt giving 100% effort? You need to say, if you behave like this on those bad days, then you are never going to make it, and thats not a punishment, that is not drop and given me 50, itss just reality, its honesty,

J its showing displeasure, its aversive?

PUNISHMENT  
PERCEPTION  
DEFINITION (PV)

M i dont think its aversive, i thin kof aversive as a consequence of your actions, something more concrete

J ok, so could it be considered aversive to an athlete if a coach is showing displeasure? Is that a punishment?

M i would hope that it is, but they haave to perceive that as puishment, and hes going to have to want to avoid that

J so if you don;t see your coaches displeasure as a punishment, then it is not aversive control

M right, bc there is no control

J just like if you dont perceive positive, then its not positive control

M right

J so athlete's perception is crucial

M righth, its critical

J is it appropriate to use aversive control with ability, ever?, like yyou did not catch your finger, it is a skill you are working on, so i am going ot sit you out or yell at you or give you pushups, is that appropriate

PUNISHMENT  
YELLING (PV)



M no it wouldnt be for me, cause i would rather have them give me a tip to catch it. I am doing a jager, and i missed the bar, and kept doing it, and you could tell he is communicating displeasure to me, and must have missed the bar 10 times, and finally he loses it, and he says i am sick and tired.....you catch it next time, so he's really mad a to me, and he get up there to yell at me, and i went it hit me on the chin, bc this is the 3<sup>rd</sup> time he yelled at me, and i didnt want him to feel bad, and i said im ok, and i chipped all my teeth. But then he did what he had to do, you always do one more time, so he said, ok leets just do one more, and then we'll be done. And i missed the bar, and he said, its fine, we'll get it tomorrow,

J was that aversive

PUNISHMENT  
YELLING  
APPROPRIATE IF USED SPARINGLY (PV)

M yeah that was aversive, and that was appropriate there, and i thought to myself, i didn't die, so lets just get back trying to catch this. And if that happened evey day, i would be miserable, but probabley 3 times did he blow a gascet. Bc the whole purpose is to change behaviour and not damage the relationship, without creating baggage.

J so with that example, was that effort, or was that ability?

M yeah i was laying back, and he saw that.

J what if you were giving everything you had, would it have been appropriate, if its not an effort issue, and it is an ability issue,

IMPORTANCE OF RELATIONSHIP (PV)

M probably not, if i tell my coach, i am giving it all i have, you have to build that trust over time, he has to believe you. One time i was gone all semester and i came back the week before finals, and for the first time, i was burned out, and i was working with my coach, but i never took time off, and i never complained about it, but it was hard, but i said to him, i was wondering if after usa championship, if i could take time off, i was afraid i was going to piss him off, and he said, yea, why dont you do that? And i was giddy, i was so excited, but we couldnt have done that if we didnt have that relationship, so i went to disney land, and that was all i needed, when i came back, i was ready to go. And i realized, he trusts me, he knows i am not trying to slack off, he understood me

J ok, it seems like you are an extrememly coachable athlete, but is an extrememly coachable athlete differnet, do you need less aversive control

I NEEDED LESS AND GOT LESS (PV)

M and i think that is true, i think i did need less aversive control., and my son is a wrestler, and this is a great wrestling program, and at this competition, and i watched this one kid lose a match, and this coach walks him outside, and gave him the worst 20 minute lecture i have ever heard, it was unbelievable, but it was terrible

*KEY COMPONENT: MOST OF THE NT ATHLETES NEED LESS INTERNAL MOTIVATION DEVELOPMENT*

J was it appropriate  
PUNISHMENT (PV)

M my sons coach said, well he is really intense and sometimes coaches need to do that, and i though, wow, not offense, but personally i lost respect for the coach, bc i didn;t think the profanity was necessary, like bobby knoght is successful, maybe this kid needs the coach to do that to be effective

J i do a presentaation called The Power of Positive coaching, and its all based on research, but the problem is there are too many examples like bobby knight that people hang on to,

PUNISHMENT  
UNDERSTANDING EACH KID (PV)

M and the problem is they dont realize these kids are here to learn how to play soccer, they arent going to the olympic games, and you cant treat them that way

J ok so would it make it appropriate if that elemenary school kid qualiftied for the olympics would it be appropriate or effective

M no, i dont know.

J ok so let me review, so there are 4 concepts that stand out from youo

number one, we were talking about what makes aversive control work, relationship is huge, 2 parts, honesty and trust, you mentioned several times,

second thing is i feel like effort versus ability, that you are feeling that effort is more appropriate to use aversive control than ability,

PUNISHMENT  
EFFORT NOT ABILITY (PV)

M yea i would say its more appropriate with effort than ability

J the third thing that is important is that the athlete;s perception is important so if you had to give me a number to give a number

RATIO  
POSITIVE TO NEGATIVE (PV)

M so the ratio with my gut feeling would be 90/10. positive to negative. Maybe 95/5 even.

J

Tim MnNeil (TIM)

T How long have you had Barry as a coach?

T 5 years now

J ok so tell me about the motivation he uses?

NEGATIVE COACHING  
BEING A JERK (TIM)

T well I think that he tries to motivate, def in a very negative way, tries to get under your skin. I usually just chop it up to, well, hes trying to motivate me, even though he is just being a jerk. But for me and my teammates, it doesn't motivate us at all, it just makes us look at him like hes a jerk in that moment

J what kinds of things does he do?

PUNISHMENT  
NAME CALLING  
QUOTE-EXAMPLE OF NAME CALLING (TIM)

T I almost walked out of the gym on him. He took me down for 20 minutes bc I get nervous at big meets, or more and called me a big baby and told me I needed to grow up and if I didn't do well at this meet, then I might as well kiss my career goodbye, bc I am at a crossroads and I needed to do well. He literally called me a baby. And that was about 2 weeks ago, and we are still, I am upset at him as a person, not as a coach. Cause at a coach he is still helping me prepare for the us championships.

J ok so do you consider that punishment, when he does the name calling and he makes threats, like your career will be over, would you call that punishment?

T yes,

J how often does he do that

T well that was one of the worse one, but the name call almost everyday, I would say

J if that was intensity-wise, pretty bad, what does a normal day look like?

HOW OFTEN-EVERYDAY  
QUOTE-EXAMPLE OF NAME CALLING (TIM)

T well just yesterday, I did a routine, and I hadn't even had a mistake, and before I go, I think he was trying to motivate me, I was about to go, he was like, you've been doing really well, so are you going to stay grown up, or are you going to back down as usual. It doesn't help when I am about to do a routine and he takes my focus off the routine

J how would you say his use of punishment affects your performance?

PUNISHMENT  
IMPACT ON PERFORMANCE (TIM)

T I would say it hurts my performance

J so yesterday you felt like it had a negative impact on your ability to hit that routine?

PUNISHMENT  
IMPACT ON PERFORMANCE (TIM)

T yeah, I did hit that routine, but before that was said, I was tootaly focused on the routing, and that took my focus off of it\

J does it affect your self confidence at all when he does that?

PUNISHMENT  
IMPACT ON SELF CONFIDENCE (TIM)

T yeah, he calls me a baby all the time. I don't believe what he says, bc I have tons of people telling me otherwise, and he does this to everybody, but I guess in a way you cant help to feel badly about yourself

J how often throughout a practice does it happen?

PUNISHMENT  
HOW OFTEN (TIM)

T usually just like once or twice daily

J if you were having a bad day would it be more>

T oh yeah

J are there days when you are having a good day and it doesn't happen at all?

T yeah but that wouldn't be the norm

J ok so lets talk about punishment in competition, does he us e piunishment there with you\

PUNISHMENT C  
ADDING PRESSURE  
THREATS  
QUOTE-EXAMPLE OF (TIM)

T yes but its not such the name calling, but its more like the threats, like, "do you know how important his routine is" I don't need ot hear that, I know.

J does he make threats, like if this, then that

T yeah, for example, last USA championship, I didn't have a terrible meet the first dy but it wasn't great, and we get to the second day, and right after I finished warming up, I was about to compete pommel horse, and he told me that, "you know this is it, you've got to show these guys that you can comptet under pressure. I don't think im portraying it well, but its def not motivational, its more like, "your career is going ot be over if you don't hit this.

J and that definitely feels like a level of punishment

T yes

J so are there other types of punishment that he uses whether in practice or in comp?

T um he'll do some in practice, if he's upset with you, it is very obvious, he will give you a preferred workout plan. Like earlier this week, I messed up the high bar routine, and he made me do like 4 more, and I ended up staying like an hour in a half. Which could be seen like he is just preparing me, but it feels like he is punishing me and making me do an obscene amount

J how do you know that he is punishing you instead of trying to prepare you

PUNISHMENT  
INCREASED WORKLOAD (TIM)

T when he gives you the assignment, his mood completely changed, once I messed up, he started again with the name calling, even when I was being successful, it wasn't friendly between us

J so how do you think his use of punishment impacts your ability to train and compete

PUNISHMENT  
ABILITY  
FOCUS (TIM)

T I think it definitely has a negative affect on me, it takes my focus off of things, if you can tell, now is one of the worse periods of mine and Barry's relationship, we kind of go through phases. It just takes my focus off of what I am doing. Instead of focusing on my routine, I find myself talking to one of my teammates, like what is his problem

J ok, let's talk about reward now. Are there times when Barry does use reward in training?

REWARD  
COMPLIMENTS

T ummm yeah I mean sure, I guess it's just hard to appreciate them when there is so much negativity. He really does care about his gymnasts, so when you do something great, he will complement. Sometimes he will sit me down and tell me that he thinks I am one of the top gymnast in the world and he is happy to work with me and proud of me, but it's hard to take seriously when the next day he will call me a piece of shit

J ok, so when he does give you those compliments do you definitely see that as a reward?

T yeah I did

J how often does he do the reward, like the compliment in practice?

REWARD  
COMPLIMENTS-HOW OFTEN (TIM)

T maybe once or twice a week, less extreme

J so once or twice a week, he will give you a passing complement,

T yeah I would say twice a week

J ok wha about a serious completement

T maybe every 6 weeks

J when he does use those rewards, how does it affect your training?

T well its positive, it defininetly brings my feeling up and motivates me.

J do you think it makes it easier for you to perform when he is giving you complements?

T yea

J so trying to get at why the punishment affects you, you said well it changes my focus, instead of thinking about my turn , im thinking about the comment. With reward, does it do the same thing

QUOTE  
ABOUT NEGATIVE FEEDBACK (TIM)

T yeah I feel like I don't lose my train of though. Umm. Bc I took the complement, it feels good, and I move on, but with the negative stuff, you can't just take that and move on from it one minute later. Like with the positive stuff, and that makes you feel good, which Is good for practice, and if you are pissed up, you are not going ot have a good practice

J does he use rewards with you in competitionm?

REWARD C  
POSITIVE FEEDBACK (TIM)

T not really, I mean if I do a good routine he will say, good job, but I almost feel like he Is just on the sidelines during competitions until something bad happens

J when he says good job, how does that compare to the passing complement in training?

T umm I don't know, I didn't really count that as a passing complement, bc its just so common, he says that to everyone

REWARD C  
EXAMPLE OF POSITIVE FEEDBACK (TIM)

J can you give me an example of what a good passing complement

T ok, like that was one of the best routines you've had all year.

J ok, so he gives you specific information?

T yeah, a lot of his passing complements are specific

J at competitions, he doesn't give those kinds of complements, its more of good job unless something goes wrong, and then he goes into the punishment stuff?

BELIEF IN SELF (TIM)

T yeah, but I feel like at a competition I never do as well as I would like, bc I feel like I always underperform at competition, it's very frustrating

J ok, do those rewards affect your self-confidence

REWARDS  
POSITIVE FEEDBACK AND SELF CONFIDENCE (TIM)

T yeah, it does, especially since when they are specific, it gives you a basis, when he compared me to one of the best gymnasts in the world, it boosts my confidence

J do you do any coaching at all yourself?

T yeah last year I was the assistant coach for the team, it was just a one-year deal though

J ok so as a coach, would you use reward based coaching wth your athletes

T yes

J what types of rewards would you use?

AS A COACH  
REWARDS  
COMPLIMENTS (TIM)

T well I feel like I would try to be positive, if they made a mistake, I wouldn't be negative, I would try to look at the bright side.

J ok, so you as a coach would try to focus on the positive and give complements

T yea

J why would you do that

T well I am going through it myself, and I think barry has forgotten a lot of what Is like to be in the gym whereas I know exactly what it is like, so I know what helps me and hurts me, and I know calling someone a name is no good, whereas staying positive, it will help

J ok how much would you try to use reward based motivation

T umm I would just try to do it in general, it would be a part of the atmosphere everyday. I think one of the worst things in practice, is if someone is down, and it transfers to another person, and the atmosphere becomes negative. I would definitely try to keep a positive atmosphere every day

*KEY CONCEPT: BECAUSE THE MAJORITY IS NEGATIVE IT SEEMS THE POSITIVE DOESN'T HAVE MUCH STAYING POWER*

J ok, would you think every turn? Is that enough or do much?

REWARD  
HOW OFTEN

T with a few exceptions, I think if someone is putting their effort into it, then yeah every turn

J can you give me some examples of complements you would give to people

REWARD

EXAMPLE OF POSITIVE FEEDBACK (TIM)

T sure, if someone takes a turn with 5 skills, and 4 of them were bad, and one was good, I would give a coaching tip to the bad skills, but then say good job with the good one. It was a lot better than you have been . so end it on a positive note, with them feeling like it wasn't a complete failure

J would you use punishment with your athletes?

PUNISHMENT

HOW OFTEN (TIM)

T um I don't think so, it might be difficult to absolutely never

J so would you view it as there would be no appropriate time for the use of punishment ever

PUNISHMENT

LACK OF EFFORT (TIM)

T if someone really isn't putting their effort into it, then it would be appropriate

J ok ,what types of punishment would you use with that lack of effort

T like, saying, what are you doing, why are you going to be hear if you are not going to try? Hopefully that would put them into gear

J ok, are there other things besides the words or feedback that you would use as punishment?

PUNISHMENT

INCREASED WORK (TIM)

T if literally the whole team was not trying and hung over, then maybe there would be a cardio punishment or a strength punishment

J ok, what if it was one guy?

T I guess I would do the same thing

PUNISHMENT

HOW OFTEN (TIM)

J ok, how often would you use the punishment, whether it would be the feedback, or the training

T I would only do it when I felt it was really deserved. I couldn't give you a number , it would only be on specific occasions.

J ok, but the rewards you would try to do as often as possible.

T yes



*KEY COMPONENT: PUNISHMENT WAS USED QUITE OFTEN WHEN EFFORT WAS HIGH. THIS SEEMS INEFFECTIVE*

Wesley (cassette) (WC)

J How much do you train in a typical week?

W about 30 hours a week

J aversive control or negative control, tell me how you understand the term aversive control

PUNISHMENT  
YELLING  
BEING MEAN  
PUSH-UPS (WC)

W well before you told me i had no clue, but as you told me, I guess it is a negative consequences, like yelling or something or being mean

J does it have to be something mean or yelling or what about something like, if you don't hit this routine, you have to do 50 pushups?

W yeah that would be it

J so i guess there is a continuum there , yelling could be on one side, and you could do 2 push ups would be on the low end

W right

J what about positive control

REWARD (WC)

W um if you hit this routine, you get a benefit or reward

J ok, so motivating through rewards or benefits,

W yeah

J ok, in your own experience, do you think there is something in the middle, or something other than aversive or positive or does everything fit in one of those 2

W i think there is something in the middle

J what would that be

REWARD  
TRYING TO BUILD CONFIDENCE (WC)

W well something positive but there is still a consequences, like jason would be trying to build up my confidence for a set, but if i miss it, there is still a consequence, like "come on, you got this..." but if you miss it, there is not the same energy? Like grouchy

J would you consider that grouchy energy aversive?

W yea but before that it is positive, so it starts positive and then it switches

J does he ever go from aversive to positive? Like when he is grouchy, does he present a consequence, or is it a consequence to just be around his grouchiness

W theres not a consequence,

PUNISHMENT  
GROUCHY MOOD (WC)

J its kind of like a consequence to be around your coach when hes in a grouchy mood?

W yeah, i mean its not fun , i mean sometimes its understandable, but a lot of times, its not really fun, like sometimes its the littlest things, like id be warming up or something, and id take a little bit longer or id come in a little bit later, like one day we had an assembly, and i was like 10 minutes late, and he gets grouchy over that, it just sets him in a bad mood for the whole workout

J what is the impact that has on you when he is in a bad mood

PUNISHMENT  
GROUCHY  
AT TIMES HELPS (WC)

W well sometimes its good bc it makes me try a little harder, but sometimes i dont think it is necessary at all

J so it sounds like sometimes you understand it, can you tell me what the difference is?

PUNISHMENT  
WHEN IT WORKS (WC)

W well say i am trying to learn a new skill, and i miss it. Sometimes I don't really think it should be that big of a deal bc it is brand new. If its something ive been trying to do for 4 years, and I keep missing it, then I could understand it, but if its brand new, he doesn't need to get mad about that, bc I get mad about that

J so if it's a skill that you have know how to do and you keep missing it, and he gets mad at you, you could understand that?

W yeah, cause sometimes you could turn that into motivation. Sometimes when someone gets really mad, it makes you really mad and you try harder, you don't really care anymore, you don't worry about getting hurt or anything, you just go as hard as you can

J so that might be a benefit of aversive control

W yeah, sometimes it helps

J how does it impact your motivation?

PUNISHMENT  
WHEN IT DOESN'T WORK (WC)

W if he gets mad at me, it sometimes helps bc I get mad at myself, then I try harder, but if I don't get mad at myself, then its just a waste of time.

J do you think it hurts the situation when hes doing that, like if you don't think he should be getting mad at you.

W I think it hurts my performance, it is a lot harder for me to work out that day bc it puts me down

J does it have an impact on your self esteem

W no

J how do you guard against that, how do you not let your self esteem be negatively affected?

W I just try not to worry about it, and put it behind me. Like some days if he comes in in a bad mood, and im not perfectly on, then he gets mad, its just not fun to be around

*KEY COMPONENT: PUNISHMENT WORKS WHEN USED ON SKILLS. I CAN DO BUT NOT WITH SKILLS NOT YET MASTERED.*

J so you are able to just say hey, that's his problem, not mine.

W sometimes,

J what about when you are not able to >?

PUNISHMENT  
MAKES ME MAD AND I TRY HARDER (WC)

W well I think it helps when I get mad at myself, cause I try harder

J so what happens is he gets mad at you, you make the decision that he might be correct in being mad at you, you get mad at yourself, you try harder, the impact is that you do things better

W right

J and we would say him getting mad at you is aversive control in that you just don't want to be around him when he is in that mood; aversive control is either a threat of a consequence or a consequence, is his bad mood a consequence?

W yea it is; sometimes it will just be a little thing and I don't agree with him

PUNISHMENT  
I NEED TO BE IN AGREEMENT WITH HIM (WC)

J so he gets mad at you, you decide if he is correct, if he is correct, you get mad at yourself, you try harder

W yeah

J ok so if he gets mad at you, you decide that he is NOT correct, what happens to you then?

W usually I just try to not worry about it, he doesn't stay mad at that situation, he is just on edge, but hes not yelling at me and giving me things to do, you can just tell that hes not happy.

J when he gets mad at you and you decide that he shouldn't be mad at you, you make the decision instead of getting down on yourself

W yeah, If I don't think he should be mad at me, I keep trying, but I have an average practices, I am not just on

J do you think that it is important for a coach to use aversive control at times

W, yea sometimes you need it, you don't need someone to be positive all the time bc it doesn't always work that way. When people get down on ou sometimes, you need it to kind of wake you up. You could be thinking that you've got something, and you are not thinking smart about it, if someone gets down on you, you realize you really don't have it.

J like a skill or a routine?

W either, I could be saying in my head that ive got this set, and you meant it, but when someone gets down on you, you realize that you really don't, you look back on it and see

J so one good think about aversive control is that it helps you reevaluate the situation, and it helps with clarification? If you think you have a skill or a routine, a coach uses aversive control to help you reevaluate, and you clarify to yourself that he is right.

W yeah

J do you ever see that the coach is wrong

W not too much, hes right most of the time

J so that ius most definitely an appropriate use of aversive control

W yes

J and when he does that, is he using that grouchy attitude as his form of aversive control? Or does he say you are going to do push ups, or anything

PUNISHMENT

EXTRA WORK

"DO IT UNTIL YOU GET IT" (WC)

W, no sometimes he'll say that you are going ot do this till you make it or work on it till you get it. Pretty much yelling a lot and grouchy

J ok what about positive control, does he do a lot of, Im going to give you fee time, or ill buy you this

REWARD

DO IT AND ILL BUY LUNCH

CANDY (WC)

W he does that a little more, like if you hit this, ill buy you lunch

J is that effective?

W yeah, he brings candy a lot

J how is that helpful? So first thing would be you are training, and he says if you hit this ill take you to lunch,

REWARD  
QUOTE (WC)

Will try a little harder, it's the principle

J so it doesn't matter what the token is, it is just

W yeah, its just something to get, its like hes betting against me , I want to show him I can do it, so I try harder, and sometimes I make it sometimes I don't

J what do you think the balance should be to use positive versus aversive

POSITIVE/PUNISHMENT  
BALANCE (WC)

W well I really think it should be more positive, more than 50% positive, more 65% and 35% negative. A little more than half positive. A little aversive does work, he uses aversive a lot, probably 75% 80% of the time

J how do yo uattribute your success when he uses so much aversive?

REWARD VERSUS PUNISHMENT  
QUOTE (WC)

W well this year it was a lot of aversive, I think I would have done a little better if there was most positive. His aversive is still effective, but not all the time. Its almost as if he uses positive as a last resort

J how do you think it would be done.

PUNISHMENT  
MAKES ME TIMID  
STOP TRYING (WC)

W I would do positive first, if that doesnt work, then do something more aversive. You have to find out what works for each person. A lot of times aversive works for me, but sometimes it doesn't. it makes me kind of timid.

J how does it make you timid.

W well if he is yelling at me, I don't want to try, bc if he thinks it works, then he'll use it all the time. Its almost as if I don't want to make it, but I still want to make it, you know

J yeah. So maybe youre not giving 100% effort.

W yea

J so when he uses aversive inappropriately, you get timid, bc you don't want to reinforce to him that his aversive control is working, so your effort actually decreases

W right, a lot of times he tries to test me to see what works, so its almost as if im showing him that this isn't what I like

J so I guess all that is based on you deciding if it is appropriate.

W yea

J are there times when you think that it isn't appropriate and he convinces you that it is appropriate>

W yeah there are times when at first im thining, this isn't right, and after a little while, I realize that I was wrong. It starts to sink in. when you figure that out, that is when it helps.

J so you contiuously evaluate whether he is correct in being aversive.

W sometimes I do, but sometimes when I get timid, I don't want to try , but sometimes you really want to hit this, so you don't worry about anything, and you just go as hard as you can

J yeah that is really interesting, coach is aversive, you have an evaluation period whether he is right or wrong; what about with positive control, do you have that evaluation period of is he right or wrong

#### POSITIVE EVALUATING THE COACH (WC)

W sometime if I miss al ot of things and hes like, o that's alright, and it didn't feel like it was alright. I listen to him, but in my head, I think it wasn't great. It still makes you feel better, even if you know you were pretty far off, it stil makes you feel a little better. I guess it keeps you uplifted

J if he is being too positive with you, do you even get in that timid state? If you evaluate that he is inappropriately using positive, what is your effort level

W most of the time, I try a little harder every time.

J so generally, even when you assess that he is being too positive, it still generally increases your motivation

#### *KEY CONCEPT: WITH AVERSIVE ATTITUDES SABATOGES SO COACH STOPS USING IT (IF ATHLETE DOESN'T AGREE)*

W yeah

J so if there is a time when he Is trying to get you in the groove., if he is being too positive, and its not working, what would help?

W I would say that I have to make the choice, there is nothing he can do. When you get in that kind of a mood, you might as well stop working out bc its just a waste of time.

J couldn't that aversive control be the motivator to make you reevaluate

#### POSITIVE VERSUS PUNISHMENT WHAT BALANCE WORKS

W a lot of times it does, but there is still that small amount of time when nothing works, I keep going through the motions, but nothing works. A lot of times it does work, 15% of the time when positive reinforcement isn't working, and then he uses aversive control, only about 10% of the time it wont work. So if he is being positive 85% of the time, but if its not working and he uses aversive, but if that doesn't work, there's a little time every once in a while, it wont work, I have to make the choice myself, about 3% of the time.

DW 49

J: What I'm trying to do is give Kevin..or give coaches..um a little better foundation to stand on as far as how to motivate people. So Im interviewing different athletes, you know, you guys having had so much success puts you in an elite category because youve been so successful. So people want to know what elite athletes think as well as you have an elite level coach who kept very well crudentialed and very succesful coah in his own right so what we are going to try to do is look at some of the ways he motivates you g8uys in an attempt to teach other coaches how to better motivate

ok

specificalky roger what im looking at is the use of aversive control, aversive control is punishment

ok

and not necessarily kevin uses aversive control or punishment, so we'll get into some of these questions but I wanted to give you some of the background which is that coaches we know and a lot of the literature for coaches says dont use it but a lot of the people who coach know it works and so as coaches we do use it and so what im trying to do is ok let's be open and honest, people use it, instead of just saying dont use it, lets realize we do use it let;s figure out how we caqn use it a little more effeectively so that specifically what im looking for ad it may come out that he doesnt use punishment at all,

just specificall kevin or any past coach

I think we can talk about anybody, lets open it up to anybody that it could pertain to first questions, did your coach, and when i say your coach, primary what im talig about is kevin, so when youre not referring to kevin and taling about another coach just let me know with kevin it was this way but now we're taling more about a different coach, dposes that make sense,

uh huh

ok so did your coach use positive rein with you when you were traing. So when you did well in training, was their a reward system

absolutely

tell me about it

yeah, umm, \

what idd stand out as being really effectively

POSITIVE REINFORCEMENT T  
REWARDS  
OLYMPIC COACH (DW)

well each their 2 y[es] of reward that i i feel are effective in the gym/ first being the kind of extrinsic rewards of kevin putting up charts of how your routines are going, whose he compared to the team and even occasionally even monetary rewards such as starbucks gift cards or cash and things of that nature and it did 2 things for us you know i think it kept track for us in terms of whose doig well in the team and motivating because you wanted to be that guy that hit the routine that got up on the board that accumulated the most points you would award points to guys that did x number of tight routines gold medal routines bronze medal routines and then there was so form of intrinsic reward that we always received from kevin in the sense that one of the reasons i moved down here is that he's the head olympic coach he kind of the go to guy, hes been that way for the last 8 years and hes been the most successful coach in the history of the mens program and so i guess when i say intrinsic its every time i raise my hand i want to show this head olympic coach that i have what it takes

ok so you bring up a good point and i want to make sure it almost seems like because of his positive reputation, that served as positive reinforcement even him taking the time to watch your routine it would kind of show that

POSITIVE REINFORCEMENT  
OLYMPIC COACH (DW)

absolutely i mean hears the way i look at it is i couldnt be more blessed that i have the head olympic coach coaching me and at the same token you know hes is achieving what i want to do in athletics hes achieved in coaching what i want to do in athletics hes reached the top of his game and therefore give me inspiration to reach the top of my game

ok how about in competition, thats a little bit of what happened in training. Let me try to summarize in that question 2, sounds like he had a couple of things number one was this intrinsic that we talked about which is basically just your motivation knowing that you had one of the greatest coaches in this sport in this time giving you attention the second part i heard you talk about charts and with this charts there were other things like starbuck cards or other reward type things like that. Aht are the just quickly what other rewards would be attached to the chart

POSITIVE REINFORCEMENT  
CHARTS (DW)

ummm well less tangible rewards i would say confidence uhhh definitely that extra kick of motivation when youre not having such a good day, the chart we can track the past a little bit and we can look back and say maybe one or two days and even kevin will say well two days ago you did this awesome.so in that sense it kept us in line from weighting too much on those bad days and grounding us on those good days

ook do you feel like kevin would use it reactively meaning you know..i dont want to lead you on that, how would kevin use it? Um would he use it if things were going bad, would he also use it just to start practice or with a clean slate, would he use it if things were already going well

POSITIVE REINFORCEMENT T  
CHARTS (DW)

um he'll use it with a clean slate for sure everything starts with this clean slate and then you know if things go great you know he'll refer to it again and how can we make it better if things arent going so well he'll also use that reward system to see how you can better yourself to get balance again, in a sense i see it as like a central point it either works positively if youre on the negative side of things it brings you back to center if your on the positive side of things it brings you back to center



ok sounds like you guys used this chart system quite often

yeah we've done it many times

how much like on a normal practice what percentage is using this chart

**POSITIVE REINFORCEMENT  
WEEKLY CHARTS (DW)**

well there will be weeks of you know 3 weeks at a time where we just every week is a new slate and it starts on a Monday and we start tracking routines tracking work outs etc and he judges the routine puts them down tomorrow the next day and he'll do that for a whole week and at the end he'll review the results and front of the whole team he'll let the whole team who did what hear you go here's your you know so it's very powerful he never slips from the whole aspect of you know I'm just doing this to do it you know there is a reason behind it and he definitely accounts for it's very accountable for what he swears he's going to do I'd say yeah we use it at work outs when there's either something coming up or it's maybe towards a little bit higher than mid season to give us that extra push into the high level of training ummm but but we use it quite frequently and that's something that I haven't in the past in Ohio state

ok during the season give me just ballpark percentage wish, during the season how much time out of 100 percent how much are you using the chart

when you say the chart I'm going to take it as some sort of system

yeah

**POSITIVE REINFORCEMENT  
25%-80% DURING SEASON (DW)**

ok I would say about 75-80 percent of the time

alright what about in non competition season

**POSITIVE REINFORCEMENT  
30%-40% OFF SEASON (DW)**  
non competition is probably around 30 or 40 or 30

1

oki how about does Kevin, one more question on the training with the pos reinf, what other tangibles, give me some examples of some tangibles like you talked one thing I heard were the Starbucks cards, what other tangibles might be rewarded to you

**POSITIVE REINFORCEMENT  
REWARDS (DW)**

uhhh taking us out to lunch or dinner, cash

when you say cash what are you talking about there

like straight up cash

large amounts

POSITIVE REINFORCEMENT  
REWARDS (DW)

no maybe no like it could be as simple as 5 dollars if you hit this palm or if your team all the way to this last intersquad he said 100 dollars for anybody who hits 6 for 6

really

yeah

ok ummm

QUOTE  
VALUE IN REWARDS AS POSITIVE REINFORCEMENT T (DW)

and believe it or not it puts a fire under our ass

oh i believe i absolelty do for 100 bucks i might hit 6 for 6. ok tell me about in competion , what does he do in competition as far as pos reinforcement and again doesnt neccis have to be charts or tangibles

um huh

POSITIVE REINFORCEMENT C  
PRAISE  
FRIENDSHIP  
SPENDING TIME (DW)

part of pos reinforcement could also be kind words or praise

yeah and he definielty does that umm you know i can account for even my recent competition with usas this lasdt usas didn tgo th eway i wanted it to and uh you know throughou t the whole competition he was kind of bringing my spirits up by using positive words by trying to instil in me tat i am a good gymnast and bringung up my self esteem and confidnec, ummm and even like after the meet he was its unbleivable ive never had a coach that wanted wanted ech of his athletes to just feel good as human beings as amazing so after the meet he spent like 2 hours in my room and me and the other assistant coach just sharing life stories about nhis past in qymnastics and how us doing gymnastics is just the sheer inspiration fo rhim to see us out there and it really grounds us in gratitude and uh i mean overall hes very very sound with positve reincouragement he doiest dish it out like its you know its not like uh free coupon or something like that and he doesnt bs around it, he sees when an athele and when an athlete doesnt need it

ok when you were just descibing that incident where he basically was showering you with supposer and praise that was after a meete you did poorly in in your opinoin,

um hhu

how would you chategorize that like when you said poorly just to given me a baseline

ummm not making th enational team

is that based on you didnt hit your routines or was it you hit and other guys were just hitting better

i would say, i hit and other guys were hitting better

ok, ok how about in competition when you are doing well how does kevin use or other coaches for the matter pos reinforcement

POSITIVE REINFORCEMENT C  
PRAISE  
SAYING THE RIGHT THING (DW)

well he just you know , puts the reminder out there that when things are going well to continue with what you are feeling and dont overwehlm yourself with excitement and things like that just stay very lecel and focused and hes definetly um how do i put it, um, he kows exactly what to say after each event, you know, when it goes really well, its i mean ii did really well this last thursday or yestesrday and uh after every single routine or event it likes its exactly what i wanted its how i imagined it its great lets keep this going, lets focus on vault

ok can you can you try to summarize for me a different, if there is one, in how he uses pos reinforcement after a good performance and after a not so good performancedo you know what im asking

POSITIVE REINFORCEMENT C  
PRAISE AFTER BAD ROUTINE (DW)

yeah..ummm..probably the main difference is tha t after an not so good performance he'll take you back to a past success, and let you you knpw remind you of that and tell you to bring up some of the feelings of that past success to remind you that you have had success in the papst and that this is just a moment of time in which this prenest moment didnt go os well if its a recent success, he (cough) he definetly does do if its a recent success hell talk about he poast and say look you were hearand look at what you did in the present moment do you see the imporvement th eline of the improvement

both are you definielty see both as a positive, it definelyt feels positive both sides if youre doing you ahdve a competition doesnt go soo well when he reminds you of past success that feels very positve to you

yeah

when you have a great meet, he reminds you also of not necc the past success but look hw far youve vome to this point now that feels very positvie

right

ok how about overall

um huh

positive reinforcement in training as well as in competiton, does it impact your self confidence

POSITIVE REINFORCEMENT  
PRAISE AFTER BAD PERFORMANCE (DW)

yes it does but i dont know if im just a i have a hard time sometimes distinguishinng between bs and actual positive true reinforcement you know ummm i guess thats one of my self limiting factros and you know i have that not just with kevin but with anybody i have a heard time letting any sort of rei postive encouragement sink in ummm for me i would sya it doesnt have as much as an impact as me doing well myself

ok

like if i had a bad performance i dont care how much pos reinforcement you give me, i mean it might help to a certain degree but its definitely not going to alleviate all my frustration

ok if you can this might be a little bit tricky but on a scale of 1 to 10, 10 being as positive an impact as possible, 1 being lets say 1 is no impact,

um huh

#### PERFORMANCE AND SELF ESTEEM (DW)

on a scale of 1 to 10 how much does a good performance affect your self confidence 10 is as high as it can there is the greatest impact possible one is no impact what so everything

10

ok how much does positive reinforcement impact self confidence how can i even ask this, let me think about it to make sure

that seems right you know

yeah i guess i wanna ask how much does i might have to ask 2 questions here how much on a scale, same scale of 1 to 10 how much does positive reinforcement effect you if the performance wasnt so good

4

so if its a hot routine the performance is there its a 10, if the performance isnt there but kevin theres or lets just stay with kevin here if kevins there with some of his pos reinforcement its a 4 ballpark

id say 5, your saying during the meet right, like going from event to event or after the whole thing is done

nah i thing, well you tell me is there a difference there

#### POSITIVE REINFORCEMENT C PRAISE EARLY VERSUS PRAISE LATE (DW)

theres is because in the competition you know, lets suppose floor doesnt go well, you know, theres still a lot of meet left, so we are going to kind of look to our coach and hear what he has to say and may be we are a little more open to receive those words than once the competition is finished, theres really not much more we can do anymore because the competition is over so those words maybe were a little more closed off and those words have less of an impact,

ok so that number you gave me a 4 thats during competition, as competitions still

no thats after

#### IMPACT OF PRAISE IN COMPETITION SELF ESTEEM (DW)

ok so how about we treated from an event to

id say its more like a 7

ok so its really impactful but not as much so as if you actually just hit your routine

no

what if what if you hit your routine and there is no positive reinforcement 1 through 10

there's a big impact there it's probably like an 8 or a 9 but still we want the feedback

so to take it to a 10, that 10 you gave me before seems more like a lack of you hit the routine and Kevin was there is 6 or 7 during competition if competition is more like a 4 if I hit the routine and there's no positive reinforcement, it's still 8 or 9

you meant impact right

right on self confidence

yeah it's gonna but I think it's an impact in a bad way whereas the 10 is the impact in a good way

so if you hit the routine and there's no positive reinforcement, what's the number, on self confidence, that's a negative

yeah it hurts

so

but but your scale of 1 to 10 was no impact to impact

yeah, hold on, there might be something here. So what you're telling me is if you hit your routine and Kevin doesn't reward you praise you give you reinforcement, it actually lowers your self confidence even though you hit your routine

yeah

so it's like a negative 8 is what you're saying, so let me summarize those numbers again for myself too, if you hit your routine and Kevin's there to pat you on the back -10,

uh huh

if you don't hit the routine and Kevin's there in his way and pats you on the back, it's a 6 or 7,

6 or 7 yeah

if it's after a competition that number might drop to a 4

um huh

if you hit your routine and he doesn't pat you on the back, but no punishment, just doesn't say anything, it becomes a negative 8

yeah it has a negative impact on my self confidence

QUOTE

WHY THE IMPACT (DW)

tell me about that, how come

because hes the coach hes seen it day in day out and i can only speak fo rmyself one of the reasons that we do this sport is were working together as a team kvein and i keven and some of the other athletes, we want to know, i can at least, i want to know, i now fo rmyself it was a hit routine, i want to know as a coach was this what you dexpected did i live up to your expectations me as an athlee, you as a coach, and if i dont hear anything at all, i start ot wonder, so now i know i hae this grey cloud rather secureing it as a like he said 10 boom onto the next one everything is finite and close, i would be left with this err of mystety like he didnt say anything at all you know, was it not a hit routine in his obook how idd he see it you know i guess that in turn effects self confidence because the self confidente person doesnt have those wavering thoughts, so i would be put in this cloud of wavering thoughts

ok so how often would something like that happen, how often would it be, again ballpark me herre to the best of your ability after a routine lets start with training, how often would it be after a routine that you dont get feedback,

never

how often in comptetion would it be th tyou wouldnt get feedback

never

#### POSITIVE REINFORCEMENT SKILLS/ABILITY (DW)

ok ok umm lets talk one m,more thing about th epositive reinforcement, how does it impacct your abiulity to learn skills to improve skills, does it impact does positive reinforcement impact your ability to learn new skills improve your skill level

yes

how so

ummm

A: Um, Well because when we're embarking on something new its uncharted territory and the coach can step in because he's almost like a navigational map in terms of his mind I say Kevin, he kind of has the passed mapped out and can basically point to an area on that map where you have had a success in aquiring something new or doing something new well by reminding the athlete that you're going into uncharted territory here and as a coach, here's a map of your passed history to show you where you have done this well so it gives you confidence in going into that uncharted territory.

J: how big of a deal is the confidence to you?

#### CONFIDENCE SKILLS/ABILITY (DW)

A: for me it's a toss-up. For me it's a toss up I would say its not as important because its new it's almost like a trial and error type phase where things might go well things might not go so well but because it's brand new, I mean no one can really expect a miracle out of the bag. But at the same token if I'm confident going into a new skill I'm usually confident because in the passed I've done this before—taken on something new and conquered it. So I channel that same energy into whatever I'm about to do new.

J: And it does seam like Kevin's feedback is really important.

A: Yeah absolutely.

J: On a scale of one to ten, how important is Kevin's feedback?

A: for a new skill, in terms of I just took a turn and he gave me feedback on it?

J: I would say how helpful is he's feedback? 1 to 10. Ten perfection as far as helpful, one not.

A: Like a five.

J: How helpful is it for you to self-assess?

A: Like a 9.

J: So for a new skill, your assessment is more important than Kevin's?

A: I think so, yes.

J: Does that feel different than during your routines at competition?

A: No it's pretty similar type of self assessment feeling, that confident feeling.

J: Okay go back to that number. And you say in a competition if I hit my routine and I get positive reinforcement, 10. If I hit my routine and no positive routine, so my self assessment is I hit the routine but I don't get a word for Kevin—it's a negative thing. Tell me more. That from hearing it, it sounds like there's a difference between that and the new skill set.

POSITIVE REINFORCEMENT C  
FEEDBACK  
IMPORTANCE OF (DW)

A: right because it's competition I think that I'm just might be my answer because it's a formality because it's something train in gymnastics to do is this one moment to put on this show performance and routine so we are much more vulnerable to what anyone has to say at that point as to just a day at the gym learning new skills.

J: Okay. Even with Kevin's feedback, you're more vulnerable in competition. His feedback in competition is more impactful than learning new skills.

A: Yes.

J: Okay, good.

27:13

J-Lets talk about punishment now. Does Kevin use punishment in training?

A-I don't know.

J- What do you mean?

PUNISHMENT  
HARSH WORDS INCREASED WORKLOAD (DW)

A-IT's something that we've I've talked to him a lot about is ah how he doesn't use the physical push aspect enough where I've come from other coaches where I've missed a routine and when I'm not on and they literally push you into the ground and you're not leaving here until you hit it. By punishment they will break you down and say harsh words. Like we just started this conversation, I think some kind of punishment used properly is very very helpful.

1. Give me as much as you can right here. The million dollar question right here. Like what types of punishments?
27. First of all, obviously there is no physical punishment. What I mean by physical punishment is he's not gonna whack you with a stick or kick you in the ear or something like that. But there is some sort of physical punishment in the sense of if you miss your routine you have twenty extra circles to do on the horse.

J- And Kevin uses that?

3. No he doesn't.

J-Oh, he doesn't. And you feel like that is at some point effective?

Oh, absolutely.

J-Okay can you give me some other examples of the punishment you've experienced? Twenty circles on the horse for a missed routine. Just give me as many as you can here.

PUNISHMENT  
INCREASED WORKLAD (DW)

So give me more examples of punishment.

- Okay, being late to practice. You gotta do a rope or clean the gym. Missing the routine you gotta do another one. You aren't leaving this event until you hit one—that's something popular I've heard in the passed.

PUNISHMENT  
CRITICISM  
NAME CALL  
QUESTIONS OF CHARACTER (DW)

J- Tell me about emotional punishments.

8. Emotionaially punishemt by. There's a fine line between that and motivating. I've had coaches in the passed break me down inby playing mind games like saying, "you just don't want it that bad do you?" or "I don't want to work with someone who doesn't want to work. Or "are you going to listen to me? You don't listen to me." I see those as forms of punishment. Even things like calling you out on not doing the work if you're not doing the work. "how do you expect to be, you wanna do this, but you're not doing the work, how do you expect to be where you wanna be." Even the extent sometimes of being called weak, or other words along those lines that kind of just break you down mentally but the coach usually knows what their doing that their investing in the longtearm success.

PUNISHMENT  
VALUE OF (DW)

J- Okay. What do you mean when you say that?



A- Cuz they're breaking you down for a reason. Number one, like with any punishment, I see it as when you're a child and you do something wrong you get punished in a way by your parents. The purpose is number one to remember the experience so you don't do that again—you don't create the same behavior over again. And you know for an athletic side it's when you get punished, because you don't want to be in that situation again, it makes you stronger to handle things. Like when you do get emotionally punished or physically punished, you are becoming stronger because you can handle more defeat or you can handle temporary defeat better in the future, maybe you'll know how to be resilient bounce back in a competition things of that nature.

J- That's a positive aspect of punishment.

A- Yes.

J- That toughens you up. Emotionally?

A- Absolutely.

J- Mentally?

A- Very much so.

J- Physically?

A- Physically as well.

32:28

PUNISHMENT  
CAUSING CHANGE (DW)

J- Because you will work harder?

A- Work harder is just one piece under that umbrella. I think its several things in terms of. Mainly when you get punished you don't want to put in that situation again so you change your attitude, you change your behavior, you change your thought process to not be put in that same punishing position again which usually means you're on the track to at least making a change and not recreating the same behaviors over again, or two, you're ah for the long term, and I say the long term because it's hard for a punishment to be instilled and them immediately the next day the person is changed. I say long term because once the punishment is instituted up front and early on, the person makes necessary changes to avoid the behavior that got them there, and long terms you see the effects of that.

PUNISHMENT C  
AMOUNT OF (DW)

J- Okay. What about punishment in competition?

A- Rarely happens.

J- With Kevin or any coach you've had?

A- Never happens with Kevin. Rarely happens with other coaches. I have had it.

J- Tell me about it.

PUNISHMENT  
DECREASED SELF CONFIDENCE  
INCREASED ABILITY (DW)

A- Okay, well one specific experience was when I was a junior and I was learning release moves and it was a ginger from my old coach Bill Foster I mean I was at Peachtree classic and I did a ginger nine times in the competition. I mean he would just not--I mean I missed the bar once and he was just standing there. So I do it like twice is normal because usually catch it on the second time. I miss it again. Do it again. I start to wonder, holy crap, you know. I miss again, he's just standing there again and this goes on nine times, I literally did a ginger nine times in the competition.

J- Okay so tell me how that impacts you.

A- I rarely missed a ginger again.

J-Okay, so performance it seems that it maybe has a positive impact on performance.

A-Yes.

J-How about self confidence?

A-At the time it really broke me down.

J-At the time. Was there a long term impact? Meaning doing nine in row—it hurts, it's humiliating, did it kinda add to that thing you talked about earlier? That it toughened you up, it make you realize I can do this.

A-Yes, very much so. Because at the next competition I vividly remember looking over the bar and making sure I caught the ginger.

J-Alright. What about in training. After those nine times.

#### PUNISHMENT

##### HELPFUL IF SHORT TERM BREAKDOWN

##### CONNECTED TO POOR PERFORMANCE

##### INCLUDED WITH PRAISE (DW)

A- I think in training its as beneficial sometimes more beneficial because you may not have, in training you're in an environment where it's okay to make mistakes, I mean mistakes are part of learning, so I think punishments fits right in, in terms of...I'll just keep the same scenario. If I had to do nine gingers in training, it's one, making me physically stronger, two its breaking me down emotionally and I still have the rest of the workout to do, and three, it's creating this large event in my training where I don't want to be put in that situation again, so next time I have the opportunity to do a ginger so to speak, I'm immediately going to remember whether is consciously or subconsciously, my brain is going to remember that time I had to do nine in a row. So I do not want to be put in that situation again.

36:31

J-Okay, so some of the appropriate—I think what I'm hearing is, that you're thinking punishment is definitely helpful.

A-Mhmm.

J-Is there a point where you can say punishment is—is there a balance, a spectrum of, okay, punishment is what I'm talking about.

A-Yes.

J-Do it again, if you don't do it right. Stay here until you get it right. It seems like that's the major theme here.

A-Mhmm.

J-You seem to endorse that. You seem to think that even if there is a short-term emotional breakdown, long-term I'm gonna be tougher and more motivated to make it.

A- Absolutely.

J-Is there types of punishment that you can't endorse. That you don't feel like would be effective like that?

#### PUNISHMENT WITH PRAISE

##### QUOTE (DW)

A-Yeah, absolutely. Um, constant punishment without praise. If there's a coach or athlete, if the athlete is constantly enduring punishment without ever getting the positive praise to balance that out—I believe that can be very harmful shorter and longterm because now that athlete is constantly having to deal with very negative words, negative actions by the coaches, and never really fully understanding the enjoyment of the process because there's never been any evidence to show that here's why I'm doing this.

J-Okay.

A-You know what I mean?

J-I think, let me make sure. So what you're saying is that it's not necessarily the punishment, it's that there needs to be a balance. Use punishment, but I also need to make sure that there's positive reinforcement as well.

A-Absolutely.

#### BALANCE OF PUNISHMENT WITH PRAISE (DW)

J-Can you give me a balance? Is at a 1:1? Do you need more positive? Do you need more punishment? If you were to throw a—

A- Well I can give you an example, well you know, I was told by Kevin one time, “Don’t leave here until you hit a pommel horse routine.” And I was struggling you know, stuff was hurting and I’m sitting here wondering how in the world I’m going to hit a pommel horse routine. And he’s kinda just standing there and uh, it this happened with Ohio State as well. You’re pretty much at a pretty low point at that point. IT’s humiliating, the guys are watching, you don’t feel good about your gymnastics, it’s a rough day, and it’s..on that fifth try when you actually ending up do hitting theroutine and the coach comes back and praises that moment that see, you know, after all that, you know, you come back and you hit a pommel horse routine that’s what I wanted you to do in the first place, see you can do it when you are absolutely at you’re worst—that’s the balance.

J-If I had to force you into a corner to give me a ratio, 1:1, 2:1, 1:2.

A-Which is better?

J-Yeah, what do you think the most effective balance of punishment to positive?

A-Yeah I understand.....

J-Remember, you’re coaching coaches here.

A-Yeah. Um, I’m gonna have to say 2:1.

J-2:1?

A- Two positive, one punishment.

J-Okay, the last question. If you were a coach, would you use positive reinforcement with your athletes?

A-Absolutely.

J-How much?

40:02

#### PUNISHMENT C HOW MUCH (DW)

A-Um, myself, probably a little bit under that ration under 2:1, but uh, I could see myself being a hardass at times, but it’s because and it’s for a great reason, you know, it’s, it’s, it’s because of those aspects I talk about. Those long-term aspects, you know, me being a hardass now is going to serve you better in the future and you’re going to see it. It’s more along the lines of for me, it’s probably close to 2:1, maybe a little under that, 1.8:1.6.

J-What types of positive reinforcement would you use?

#### USING HONESTY (DW)

A- Um, I don’t like to blow smoke up people’s butts, so you know, I’ll make sure that whatever I’m telling the athlete is the truth. But I will want to put it in a way that is air of respect for what my athlete is doing. Definitely not sugar coat anything, yet at the same time, I would wanna put it in a way so the athlete would know where I’m coming from. You know, this positive reinforcement isn’t to help you live in this fantasy of world of ‘I can do anything I want,’ but it’s more so that, especially when the athlete might be down on themselves, I think that’s when the positive reinforcement can really serve purpose.

41:43

J- Okay. SO I’m hearing that, I’m going to take that what you mean, is that a very effective form of positive reinforcement, is honest, positive feedback.

A-Aboslutely.

J-Honest being very important. Alright. Let me ask you this. You kind of talked about three different types of positive reinforcement. Praise, or feedback.

A-Mhhmmm.

J-The chart type deal.

A-Mhmm.

J-And then tangible results, or tangible rewards.

A-Mhhmm.

J-Of the three, rank them in order of what is most motivating for you.

A-There was praise, there was charts, and—

J-And tangible rewards, Starbucks cards, whatever.

42:20

## REWARDS AS COACH

### CHARTS, REWARDS (DW)

A-(laughs) Most motivating would be the charts, those types of things. IT's one, it's feedback, it's there in black and white it's numbers, it's ah, something to reflect on, something to learn from, it charts history. Because the extrinsic rewards is oh yeah, I got my Chick-fil-a coupon I can go get a sandwich, for getting a p-bar routine, but that moment in time is very finite. It's in one ear out the other, I think the chartss and whatnot really push me to, what's the word I'm looking for? Kind of on the lines of "stand out" but—it brings out the competitor in me.

J-It seems there's an element of, social evaluation there. The charts bring out an element of social evaluation.

A- Absolutely, yes.

J-Okay. Let's talk about punishment. If you were a coach, would you use punishment?

A-Yes.

J-What types? What are the most effective types of punishment?

43:30

## PUNISHMENT AS COACH

### INCREASED WORKLOAD

A-Um, I believe physical. You know, you hit one routine, you gotta do two more. Of, if you were late to practice, you gotta climb a rope. Or, ah, you know, if you move your hand again on this, I'm taking it out of you're routine. Something like that.

J-Okay. Let me make sure I summarized this last thing.

A-Because I think that physical, I think that emotional comes along with it. So I don't think it's as important to hammer down on the emotion right away.

## PUNISHMENT

### NOT EMOTIONALLY "BEATING UP" (DW)

J-So beating up emotionally is not effective as, if you miss, do it again. If you break team rules, you're gonna do a strength.

A-mmmhhmmm.

J-Those things you think add to your ability to perform and believe in yourself?

A-Absolutely. And to your value as a human being.

J-Okay. That's pretty good. Great stuff. Do you have questions for me?

A-Nope.

J-Appreciate it.

A-Was it what you were looking for?

J-Oh, it's great.

## Sean (K): Ways to help coaches coach (51)

J does your coach use postive reinforcement or rewards in training

## POSITIVE REINFORCEMENT

### FEEDBACK

### KIND WORDS (K)

K Um yes, yes he does. One thing that he is great at is the words he chooses. Um if it was a bad turn, he would say what you could have done better, or it wasn't your best turn. Honestly sometime I just want to hear "that was bad" and i know you don't want to use negative words. Sometimes, using positive words sounds like a sugar coat to me especially if i know that i didn't do something at the level i know i am capable of. Sometimes i feel like i need that tough love. A coach i used to be with, Macy, was good at that, in fact, he was quite the opposite of kevin. I think he did a little bit too much, but umm something that kevin is good at is using those positive words to say ok that could be better or you know you can do it better, lets figure out how to do it better. But my other coach, macy, he would be so blunt, it would almost feel like nothing is good enough for this guy, unless your 10-0, nothing is good enough

J what was more effective

K ummm i think it depends on the age level, honestly, i think right now kevins way is more effective because i am not looking to please kevin, i want to do this for myself, and i have outside reasons too, but kevins approach encourages me and reminds me that im doing it to please myself and achieve my goals, not to please kevin. Whereas the other way, would have been that. But if i were younger i don't think i would have understood that and i needed that outside motivation and someone to believe in me and someone who wanted me to work for their attention

J ok, tell me about that. So what you are saying is with macy, he seemed to be less positive than kevin,

K with the words he chose to use yes

J you feel like with macy, was it more effective to have less positive feedback and a younger age for you? Is that what you just said

#### AGE DIFFERENCE POSITIVE VERSUS NEGATIVE (K)

K that sounds weird doesn't it, but i think so, for me i think, it did because i didn't know how to get to where i wanted to go at the time and Macy had the knowledge and experience, so i was following him, and it was almost as if i was working for me, and now i feel like i am working for myself, but i had the experience and knowledge

j ok so his tough love, you needed it because you were less knowledgeable of what you needed to do back then

K yes

J and so the tough love was necessary then, but now as you have taken ownership of it, the pats on the back seem to be helping?

#### KIND WORDS HELPFUL BUT CAN BE OVERDONE (K)

K yes, but i still wouldn't mind if every once in a while kevin would say, that was just bad. And, growing up, i got spankings from my mom and dad, but there became a point where i was too old for spankings, but now it is time for you to take ownership for what you do, so that is when i had to be accountable for my actions, instead of being hit for what i did wrong

J can you just give me a definition of tough love, just the best you can

#### TOUGH LOVE DEFINITION (K)

K tough love to me means something that you do to help a person that may not feel beneficial to them at the time, but you know will be beneficial in the long run

J can we say a punishment is beneficial if it causes a person to change their behavior

K yes

J feels like tough love includes an element of punishments. Poor behavior, using punishment, what types of punishment are there

J spanking is one thing, but at the gym, what did macy use, what does kevin use?

PUNISHMENT  
YELLING (K)

K with macy, punishment was being yelled at, he punished the younger kids differently that with us because when i was with him i was 16, but punishment was bneing yelled at, it was always reinforcing, it wasnt "you are so stupid" he never belittled us, it was " what are you doing, you know you could do so much better than that" so he was always reinforcing us because we are not giving him everything we have every turn

PUNISHMENT  
ACCOUNTABILITY (K)

J it almost sounds like positive punishments

K yes, kevin doesnt yell at us, he has a much different style, kevins punishment would be, "this is what you want so you have to work for it" or "you know you didnt apply yourself for the past couple weeks, so you brought this outcome on yourself, so this is your doing" he holds us much more accountable. He raises our integrity to a higher level to hold ourselve accountable

J yeah it almost soounds like kevin uses form of self-imposed punishment. He uses words that gets you to a point of wehre you punish yourself

PUNISHMENT  
FEEDBACK CHANGES WITH AGE (K)

K yes, that you. And thats what i mean when i say it changes with age, because that is much more applicable in the adult world. You are not going to have that guy yelling at you, you are going to get fired, you are not going to get a spanking, or tellikng you to raise yourself to another level, or else you are just going to lose yourself in a corporate world and get tranpled over.

J ok, how does positive reinforcement impact your self confidence

POSITIVE REINFORCEMENT  
POSITIVE WORDS INTERNALIZED INTO SELF CONFIDENCE (K)

K it is a huge impact because once i started hearing more of it, i started changing the words that i used in my self . Now before i take my turns, i always invision what i want out of that turn, feeling what i need to do, and i perform the turn, and lets say the turn just didnt go so well, then i would get frusted, ok you know you need to get your arms up....and i will reasses my turn before the next turn instead of "ok, sean you are stupid, just get it done" thats how my self talk would be before. So now it, "come on, sean, you know what you need to do, so just focus and get it done."

13:38

J ok so before when you used to say "Sean stop screwing aroound, are those Macy's words that you are internalizing?

K yes

J so when kevin does a nice job with praise, that becomes the way you speak to yourself

POSITIVE  
NO WORDS AT ALL (K)

K, yes, i rarely heard praise from Macy, and actually he would say, if im not saying something to you, you are doing something right, so we learned to learn taht Macy was happy if we werent hearing him

J so with Macy, how does his style of coaching impact your confidence

POSITIVE REINFORCEMENT  
IMPACTS ABILITY WHICH IMPACTS SELF CONFIDENCE (K)

K i mean, his style of caoching impacted my self-confidence because physically i became a lot better

J so you became more successful because of his style, and that impacted your self confidence

K yes

J how does Kevins style impact your self confidence

K because now mind body and spirit, my gymnastics is coming in line

J does kevins style of coaching, the more positive approach, does that style of coaching immpect your self confidence regardless of performance? Am i making myslef clear, like with Macy it was kind of like this....punishment style of coaching improves performacne, performance impacts self confidence in a positive way

K yes

J with Kevin, positive style of coaching, does it impact your perfoamce as much as macy's?

POSITIVE REINFORCEMENT  
WITH KIND WORDS  
IMPACTS ABILITY AND SELF CONFIDENCE (K)

K yes, umm when i was with macy my performance was physically, i became much better in the sport, but i was very wet behind the ears when i wanted to learn how to compete, so my skill level increased a lot, but mentally ummm i was just a time bomb, and iw as hot and cold in meets. With kevin, ummm, i can fly to russia, walk off a plane, and be fully confident, hadnt really trained weeks before that because i had been having really bad sciatica pains, gone to the competition hadnt trained and hit because i believed i oculd. I had internalized those feelings so my body knew what to do and was reminded of what i had to do.

J ok so macys style of coaching affected performance more than self confidence, but performance really then impacted self confidence

K yes it did because i wasnt very confident before my performance started,

J but you just started doing so well?

K right

J with Kevin, does his style of coaching impact your self-confidence and then that impacts performance?

K yes, yes

J is that right or am i filling in blanks?

K yes thats right

J with kevin, does positive reinforcement impact performance and confidence at the same time. With Macy, it felt like, what ive heard, is that punishment impacted performance, performance was then the hinge for self confidence. Here, with Kevin, does confidence impact performance, or does positive reinforcement impact both

POSITIVE REINFORCEMENT

KIND WORDS IMPACTS SELF CONFIDENCE THEN IMPACTS ABILITY (K)

K I think its the self confidence because i really began to believe that i could do it more which improved how i performed

J great, ook, thats good stuff. Ok, lets talk about punishment a little more. Punishment in competition, is it used?

PUNISHMENT C

AGGRESSIVE SPEECH (K)

K ummm well with Macy, and we werent performing the way we should, we usually got a pretty aggressive speech in the hallway or behind a curtain, which usually went along the lines of, "what do you train so hard for? To come out hear and compete like crap, and im embarrassed to be out ther eiwht you all..." And it was like, dang, we are really leting him down, we need to step it up. Thats hoow it impacted me, anyway

J Would that be in between events, or after the competition, or both?

K Both

J How does that impact your self confidence?

EXAMPLE OF IMPACT OF AGGRESSIVE SPEEACH (K)

K Ummmm i know it made me feel bad because, here i am in the middle of a competition, and im not purposely doing bad, its just the way the meet is turing out, and then i get this talk saying, "wwhy do you train so hard, why do we do 5 routines of 3 events, so we would do a lot of routines, so it was like "why do you work so hard, I am embarrassed to be here with you". And im just thinking to myslef, "man, Im upset because im not doig well, but im also letting this guy down, because he puts so much work and effort into training us, so i have to step it up another notch..

J so when he gets on you, when he uses criticism, self confidence, in pure relationship to self-confidence, up, down, stay the same?

22:52 DW 51

PUNISHMENT

AGGRESSIVE SPEECH

SELF CONFIDENCE (K)

K: I think in just pure relationships and self confidence, the confidence pretty much stayed the same, if not it even went up a little bit



J how does it go up

K bc there was reinforcement speech , there was a speech that reinforcement how mych work i put into this competition and the performance im having at this competition, and i wayed so much on how i was competing and not the input piece, the piece that i put into this competition, ,so i think my mind after a speech like that began to shift and.. i need to step it up a notch, i know o can, i dont want to let this guy down, so im just going to go compete and not be fearful anymore.

J it seems like even in liight of what you might call criticism or punishment, there is an element of “i can do this”

K yes

J how, did Macy do that, did he teach you, like that to me is an eliement of self confidence, where does that self confidence come from, did he give it to you, did he help you establish it?

PUNISHMENT

WORKS BECAUSE I KNOW HE CARED AND BELIEVED IN ME (K)

K when i went to Macys, my first competition i hit a 36 and did 6 events, and my last competition of the following season, i was scoring 50s 51s, so that was over a rigorous, before the summer he said what do you want to do with gymnastics, and i told him and he said, you can do it, ut you are going to have to wor, , your not naturally talented like al ot of people...but that doesnt matter, if you work hard, ou can do it. And that was the difference, so I said ok you told me everything everyone else toldy me, but you told me i can actually do it, and he put all these extra hours into me over the summer. So when he yelled at me, i felt like he was yetllling out of love, not because he was angry, but dissappointed

J how did he send that message, how was he able to capture that, how was he able to yell, but sen dyou a message of “i believe in you, and I care about you”

K he never belittled us, it was always “im telling you time and time again, make this tap earlier so you can catch it, what is so hard about that, I know you can understand it, ive seen you do it, you're not doing it right now, so remember what you did before, get up and do it” or simply :you are better than this, and you are frustrating me now, because im not seeing it, im putting 110 percent in my coaching, you are not giving 110 percent as an athlete

J can you come up with a ratio, like, you now as a coach, what do you think a ratio of positive to punishment, like 4 positives for every element of punishment, you tell me from a coaching standpoint, what iss a good balance?

RATIO OF POSITIVE TO PUNISHMENT (K)

K i would say 3 to 1

J positive to punishment

KEYS: TRUST AND SELF CONFIDENCE (K)

K I think the keys are trust and self-confident

J tell me more

K I think you really need to develop a trust relationship between coach and athlete and i think once that is established, then the self confidence will begin to development because they trust that you care about them, that you

are leading them in the right direction, so they are more receptive to your positive reinforcement and that will allow them to be more self confidence which will improve the performance

J as a coach, how would you use positive reinforcement. Like examples, what types of things would you think would be a good way to use positive reinforcement.

K do you mean, like “that was good”

J so i would call that positive feedback', an example of positive reinforcement, like other examples of it, as a coach, what do you endorse

POSITIVE AS A COACH  
USING GOALS AND REWARDS (K)  
POSITIVE FEEDBACK

K the last athlete that i coached, i did do a stair step, and we would have goals for every day, stick x dismounts or whatever, and the stairstepping case would lead to his next competition, and this would track his progress, as he sees it go higher and higher to the meet. i guess i never use anything physical for positive reinforcement, never bought anything, but another form would be the competition—i almost used it as, lets step up every day until you get to the competition, and hopefully, he would hit that competition because of all the work he put into it, but no matter how the competition turned out, there would always be positive feedback from me. To say, if it were a good competition, see look at all the work you put into it, look at the chart, and now look at how good you did, how good do you feel. If it wasn't a good competition, we put all this work into it, but look at the experience you gain, we have to change some things, maybe you got nervous and we have to talk about that, but we need to get these out of our system now, so when we get to the bigger competition, this won't happen, everything is a win win

J everything is framed as positive, you can do it--ok, punishment, do you endorse punishment as a coach

K yes, when kids don't work to their potential, it really annoys me

31: 40

PUNISHMENT AS A COACH  
AGGRESSIVE SPEECH (K)

K and um and I would sometimes revert to a little bit of Macy on that one, I'm not going to say i wouldn't yet, sometimes i would, but I would always reinforce my words with positive feedback, “you know you can do this, we've done it time and time again, why are you making the same mistake, what is going through your head. It was always asking them a question so they can give me feedback. But at the same time, letting them know that ummm that I'm talking to you like this right now because I am very passionate about how well you do and if you don't do well, then I'm not doing what I should do as a coach, and that is how serious I take it, and sometimes i let them know that I want you to do well because i know you can and ummm and if you don't do well, then I don't do well, if you haven't done your job, i haven't done my job. And well means a lot of different things, well does not mean you've won, well means you've done the best you can do and i always let them know that.

M ok, with punishment, when you say i would revert back to Macy, i'm assuming that is the yelling and being critical of them?

PUNISHMENT  
YELLING AND IMPACT (K)

J yeah, sometimes, and even the last person i coach, one time he just broke down and he was just like nothing i do is never good enough, and that just brought back some of the feelings with Macy, and i think I was a stronger person than he is, i think when i was his age, i think i was a stronger person, but ummm but then i learned that i just had to

take a different approach and i think different strokes for different folks, and umm, and so i kind of had to back off a little bit because it wasn't true, i still need to do better with the feedback thing, ummmlike you know macy said if, no feedback means good feedback, basically

M do you agree with that

J no

M so when you say i need you to do better, back to that 3 praise for every criticism, instead of 0 for every criticism. So let's think other punishments, do you endorse other punishments outside of the kind of tough love or being critical

#### PUNISHMENT AS A COACH OTHER TYPES (K)

J yes, it depends on the age group, but I've kicked kids out before, i've used conditioning as a form of punishment, and it really has to get to a point where that is not my first action, but it has to get to a point where i am just fed up, because these things aren't working, i've talked to you, and it's not working, i've told you how i've felt about the situation, you know i'm frustrated, and your not changing your performance, so i'm going to need you to leave the gym and think about this, or you've wasted enough of my time so you've wasted my time and your parents money and step outside the gym and think about this

or I would use conditioning as a form of punishing, bc quite frankly sometimes kids don't get it, so i have to do something

M so plug it in with you, have those punishments used with you kicked out more strength, for your own performance as an athlete

#### PUNISHMENT INCREASE STRENGTH (K)

J i never, no i'm lying, i've had strength or conditioning as a form of punishment,

M helpful or not?

J yes, more kicked out helpful,

M how, what was the positive in that

J once I was kicked out, i love gymnastics, and kicking me out of the gym is to say, you know you can not do what you love to do right now, and that was just one of the worst things you can do to me because that is just really want to be, and then the competitive side of me was like these guys are getting better right now, and i'm not

M so that punishment, getting kicked out, how does it influence self confidence

J no, i don't think it does, it didn't make me less or more confidence

M performance?

J yes, because I didn't want it to happen again

M so you worked harder,

J yes

M followed the rules

J yes

M awesome, questions for me?

J No

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