

Perceived Loss Amongst Collegiate Athletes and Negative Effects

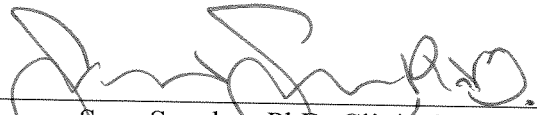
Tiffany Wilson-Landrum

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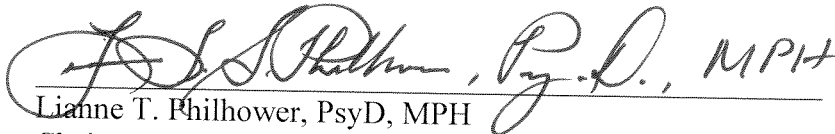
Perceived Loss Amongst Collegiate Athletes and Negative Effects

This Clinical Research Project by Tiffany Wilson-Landrum, directed and approved by the candidate's Clinical Research Project Committee, was approved by the faculty of the Hawai'i School of Professional Psychology at Argosy University, Hawai'i in partial fulfillment of the requirements of the degree of Doctor of Psychology in Clinical Psychology.



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Abstract

The experience of competition loss amongst athletes is inevitable when playing sports, whether it is for a team or individual match. Over the past 10 years there has been a variety of studies that focus on winning and losing in life events amongst animals and within sports; however, there is limited research that focuses on losing in sports competitions and the negative effects associated with losing amongst college athletes. This research project explores the relationship between competition losing amongst collegiate athletes and the occurrence of depression, anxiety, anger, and aggression. This research project aims to explore this relationship and develop strategies that can be incorporated into an intervention that helps athletes after competition losing. This research project also explores the use of measures that have helped clarify the relationship between competition losing and personality traits. While there are assessments used to measure athletes' depression, anxiety, anger, and aggression, these assessments are rarely used with athletes who suffer from losing. Understanding and gaining knowledge in this area of competition losing can lead to developing coping strategies and intervention techniques for those who have a wide range of emotional experiences after a competition loss. This research project enhances one's current knowledge about competition losing, adds to understanding the effects of losing, and is includes a pilot intervention that may support collegiate athletes through mindfulness based techniques.

Table of Contents

	Page
Table of Content.....	v-vi
List of Figures.....	vii
Introduction.....	1
Brief Overview of the Literature to be Reviewed.....	1
Rationale and Purpose of the Study.....	6
Research Questions.....	6
Significance of the Study.....	7
Review of Literature.....	9
Loss and Affect.....	10
Loss and Cognitions.....	12
Theoretical Conceptualization of Winning and Losing	13
Evolutionary Model.....	13
Maladaptive Cycle.....	14
Family Theory.....	15
Biological.....	16
Personality in Sports.....	16
Treatment.....	19
Programming and the Logic Model.....	21
Case Examples.....	22
<hr/> Mindfulness Training Using the Logic Model.....	24
Introduction.....	22

Rationale for the Model.....	24
Theoretical Foundation.....	26
Core Assumptions.....	28
The Model: An Overview.....	29
Core Components of the Model.....	30
Model Application Diagram.....	36
Clinical Case Example.....	37
Strengths and Limitations.....	45
Ethical Considerations.....	48
Summary.....	49
Discussion.....	51
Relation to Original Question.....	51
Clinical Implications.....	53
Recommendation for Future Research.....	53
Conclusion.....	54
References.....	55
Appendices	
A. Copy of IRB Certification Letter.....	59
B. Copyrights Permission.....	60
C. Facilitators Manual.....	62

List of Figures

	Page
1. Model Overview.....	30
2. Model Application Diagram.....	36

CHAPTER I

Introduction

It was once stated that there are worse things in life that can happen other than losing a game, nonetheless, pain is felt after a difficult loss and joy comes after a great win. Games produce both joys and pains (Alfoso, 2016). Furthermore, joy comes in finding meaning from the suffering of taking the last shot or through strategy planning. Although sport competitions are not a matter of life and death, it can feel that way sometimes (Alfonso, 2016).

There are significant diversity and cultural aspects to consider when examining the sport experiences of individuals and teams. People from their own individual cultures and background not only make up a team, but become part of a team and perceive losing based on their own cultural or background beliefs individually and collectively. College athletes and college teams that are made up of people from various backgrounds influence the perception of losing. In general, the sports culture regards “losing” very differently than the general population considers loss (i.e. loss of a board game or card game, loss of a position in promotion). The sports culture sometimes makes the losing of college games feel like *life or death*.

Furthermore, each team creates a winning and losing culture of its own depending on the failures or successes of the franchise or organization. Aberman (as cited by Vascellaro, 2017), a sport psychotherapist, claims that changing the mood of one’s organization is key; and one should avoid fixing problems and instead manage other’s moods. A coach who experienced losing in New York, challenges losing teams and franchises to not be content with barely winning games (as cited by Rhoden, 2001). Being content with losing in the culture of sports is negatively looked upon. This message was said to have resonated with many, from Pee Wees to Division 1-A, especially those who were challenged with shifting a culture that acquired low

expectation due to losing (Rhoden, 2001). This coach's statements in New York was considered an outcry and reached the ears of coaches in Texas, who too suffered from losing seasons. A coach in Texas faced the challenges of altering negativity and low self-esteem amongst high school football players (Rhoden, 2001). Regardless of where the team may be geographically located, teams across America struggle with the concept of losing in sports, trying to address and changed what comes about when experiencing a losing season. Many coaches and athletes are pushing for change in the culture of football sports from negativity to more positivity when experiencing a losing season (Rhoden, 2001). The individual athlete who may have their own attitudes and belief about losing is based on their own cultural beliefs. The team, depending on their season's success and the make-up of their players will generate their own cultural attitudes and beliefs. And the organization as its entirety generates a cultural belief and attitudes towards winning/losing, influenced by many factors. All levels have an influence on how the individual athlete may view winning or losing and influence how the reaction to such an outcome.

Negative Affect and Athlete Performance

Main variables include depression, anxiety, anger and aggression, positive affect and negative affect. Hofmann, Sawyer, Fang and Asnaani (2012) associate emotional disorders with negative affect. Negative affect drains the athlete's energy and causes one to have poor coping skills with given challenges in a situation, which then intensifies one's experience of the negative affect (Hofmann et al, 2012). Negative affect limits behaviors and is associated with withdrawal and avoidance, while positive affect develops behaviors and in turn, improves one's resources (physical, social and intellectual) (Hofmann et al., 2012). Hofmann and colleagues explain that positive affect is associated with subjective wellbeing and is more related to approach behaviors, encouraging explorations and curiosity, as well as happiness. These

experiences are harder to define and predict. Cox (2008) describes mood states as situation specific, rather transient, and associated with an environmental stimulus that provides a psychological response. Cox describes state anxiety as immediate, and portrayed through apprehension, fear, tension, and arousal which can affect future performances.

According to Cox, two behavioral factors define aggression: (1) behavior aimed at another person to directly cause physical harm, and (2) the cause of the bodily harm is expected to be successful (Cox, 2008). Hostile aggression is when one's goal is to injure another person and gaining the reinforcement of the pain and suffering of the other person. An example of this is a pitcher hitting a batter after being angered by him; the goal has become the harm to the other rather than the win the competition (Cox, 2008). Emotional aggression is when one uses intimidating gestures or verbal abuse against another person. An example of emotional aggression is when a player or coach argues with a referee (Safraoui, 2014).

The symptoms of depression, anxiety, and anger can generate maladaptive behaviors that include aggression. Maladaptive behaviors are those characterized by aggression. Safraoui (2014) provides three types of aggression: physical aggression, emotional aggression, and competitive aggression. Physical aggression includes any form of touch towards a victim or inanimate object (Safraoui, 2014). An example of physical aggression would be a coach snatching a player by the jersey or breaking boards over their knee. Emotional aggression occurs when one uses intimidating gestures (standing over someone after scoring on them) or verbal abuse (cursing at the referee/teammates) (Safraoui, 2014). Competition aggression, according to Safraoui, encompasses both forms of aggression in competitions and is based in competitiveness (Safraoui, 2014). For example, talking to someone at the free throw line negatively to distract them or stepping on their foot before jumping and reaching for the rebound to gain the advantage

are forms of competition aggression. These various sport examples of how the symptoms of depression, anxiety, and anger can generate maladaptive behaviors that include aggression often occur when one is losing. When athletes begin to lose, they are more likely to engage in these defined aggressive ways, physically emotionally or more competitively.

Rationale

Over the years, mood states and personality have been heavily studied in the field of sports psychology, with most of the research focused on pre-competition emotions and personality traits that seem to contribute to optimal performance among athletes (Cox, 2007; Pargman, 2007). Mood states and personality traits of injured athletes have also been heavily researched within the field to help provide the best rehabilitation and psychological services for those seeking optimal performance functioning optimal healing of the injured. Emotions are believed to influence how an athlete performs (Cox, 2007; Pargman, 2007).

Unfortunately, there is limited research focusing solely on competition loss in various sports. When athletes compete, they go against each other, they try to beat the clock, and anything that is a hurdle between them and winning (Safraoui, 2014). When athletes fall short of winning, what does the athlete need?

Emotions are momentary responses to something usually associated to a physiological change, a subjective experience, and action tendency (Cox, 2008). Emotions were defined by Lazarus (2000) as interpersonal or social psychophysiological reactions to one's environment, with the additions of cognitions, motivations and relational variables. These variables were important in the concept of increasing and holding onto one's emotions (Lazarus, 2000). After a loss, an athlete is fully capable of feeling more stimulated or experiencing anger (psychophysiological reaction) due to missing a tackle or shot (environment). Negative thoughts

about the situation and the athlete's internal motivation to make that shot impacts how the athlete feels (e.g., remaining angry). There are three types of responses which includes: a subjective experience (known as affect), impulsive actions, and physiological changes which Lazarus (2000) states are things that tend to mark one's emotions as innate development (Lazarus, 2000). The dysregulation might lead to an argument and/or fight with teammates (Cox, 2008). The athletes may react impulsively, like kick the ball or fight with a teammate. According to Safraoui (2014), society frowns upon and disapproves of the physicality and emotional aggressiveness of behaviors that are not only permitted but accepted in sports due to the desire of winning. Athletes not only show anger and aggression, but can become withdrawn and show signs of depression.

The current research project explores various aspects of competition losing amongst collegiate student athletes. This project evaluates student athletes experience with losing and examines if there is a personality type related to expressing losing in a specific way. Mental health services and sports professionals can benefit from the understanding of losing amongst athletes to create interventions that help the student, leisure, and professional athletes.

Sport psychology is a newer and emerging field, likewise, the phenomenology of winning and losing has been growing as a research focus amongst non-athletes and athletes over the past 10 years. This is important to know because there is still an abundant amount of information and knowledge to be learned in the phenomenon of sports. There is need for an expansion of theory and an increase of knowledge in the area of sports psychology. It is evident that negative effects can occur after a frustrating competition loss, but mood states may vary. Mood states like depression, anxiety, and anger, not only impact the athlete's performance but also affect interpersonal functioning in general. More knowledge about collegiate athlete's experience with

losing is needed; in addition, it is important to know if negative emotions as a result of losing can be supported by mental health services. Likewise, exploring the influences of personality on athlete response to losing can greatly expand our current understanding of this phenomenon in sports psychology. Cox (2008) claimed that mood states may have a stronger effect on one's behavior than the effects of one's personality trait. This leads to further questions, that can be researched, for example, the inquiry of mood and personality influences on the athletes' behaviors.

Purpose

The main purpose of this project is to create an intervention that can help reduce the maladaptive behaviors that result from losing, especially those that are related to aggression and impulsiveness. This intervention will also address the symptoms of depression, anxiety, anger and aggression in competitive sports amongst college athletes.

Research Questions

Athletes describe their experiences after losing a game differently and individualistically; some experience it through sadness while others through anger. Some experience anxiety while other experience aggression and behave in verbally or physically aggressive ways. Depending on one's competition level there is more significance placed on winning and losing. The more important the competition level to an individual, the more emotionally invested. It is known whether losing at a collegiate level generates more negative emotions and behaviors than during earlier stages in life of athletic development. The following research questions have been developed to address these unknowns.

-
1. What are the different aspects of losing a game as a collegiate athlete and how can sports psychologist help?

2. What interventions are in place to reduce a negative experience?
3. What would an intervention that addresses maladaptive experiences of competition loss among collegiate athletes look like?

Significance of the Study

The key stakeholders and audience of this paper regarding competition loss experienced by collegiate athletes is not only restricted to collegiate athletes. Other stakeholders include coaches, athletic trainers, athletic directors, the athlete's family members, fans, and sports psychologists. Through this study, college athletes may gain a better understanding of what they are going through and not feel alone in their experiences of losing. They may feel supported in seeking help if they know that there are interventions readily available to help reduce any of the problem symptoms related to losing.

Coaches could better understand their players. Coaches could approach the end of games differently or better prepare teams for their next game differently. Athletic trainers could be further qualified by understanding both the mental and physical health and provide insight into the mental health of athletes and encouraging them to seek help when exhibiting negative and nonproductive behaviors as a result of difficult emotions related to losing. They could work with the whole athlete, physically and mentally. Athletic directors could create and enforce rules, policies, and procedures for athletic programs and encourage interventions that help improve athletic performance after competition loss.

The athlete's family members may become part of the athlete's mental health resources if they learn to understand their family athlete better after a loss. The family may be more able to provide greater support for the athlete. Fans may stop placing judgements on athletes and provide better support if such symptoms could be identified and understood. Sports

psychologists may gain valuable knowledge from the results of this project which could lead to the development of better coping strategies and intervention techniques that help athletes resolve negative emotional experiences after a competition loss as well as strategies that enhance their resiliency.

CHAPTER II

Review of Literature

Statistically it was found that over 40 million youth participate in organized sports and that this is considered a significant achievement while young (Sagar & Jowett, 2012). College athletes more than likely started playing sports while they were young. Optimal performance in sports is vital and valued in today's society; it is monitored and evaluated by so many (Sagar & Jowett, 2012). People watch sports hoping for the best outcome, a win and to see athletes play at their elite best. Many evaluate the sport and the athlete; but how often do they focus and evaluate the effect of losing? Although there is limited exploration of the relationship between losing in competitive sports and its effect on athletes, there is enough reason to believe that there is a negative correlation between losing and positive affect (Arathoon & Malouff, 2004).

Universally, all competitors within any competition will experience losing (Sagar & Jowett, 2012). If an athlete experiences a non-winning season when expecting to be a part of a successful team, the athlete may leave the team unless the unmet goal can be counterbalanced (Matheson, Mathes, & Murray, 1997). Matheson, Mathes, and Murray (1997) express how individual goals may have to be suppressed at the cost of obtaining team goals. Athletes become more frustrated and lose their desire to be a part of a team when personal goals are sacrificed. Among high school basketball players and wrestling athletes, team cohesion is found to increase after winning. Collegiate volleyball players also experienced an increase of cohesion within the team after winning rather than losing (Matheson et al., 1997).

Winning and losing are both extremely important experiences, but the production of emotions produced from each experience makes winning to be more desirable (Sagar & Jowett,

2012). The feelings an athlete gets after winning pushes the athlete to have that emotion again, and not to the feel negative emotions that comes with losing.

This motivation to win is an important area to research further. There have been little examined in this area, yet significant findings of decreased positive affect after losing have been found (Arathoon & Malouff, 2004). This area in the given population of collegiate athletes, is so minimally studied that Sloman, Sturman, and Price (2011) decided to take a broader approach and explore animals and the relationship of negative effects after losing. This direct connection between observed animal reactions were given and its crossover relationship to humans was then explored further. The sports culture emphasizes the outcome of winning. If one loses, the feelings of regret, sorrow, and shortcomings are painful experiences felt by the athlete (Sagar & Jowett, 2012).

Loss and Affect

The perception of failure or losing in sports amongst athletes appears to elicit affects and emotions that depend on the nature of the sports outcome (i.e focusing on beating an opponent in wrestling, may produce distress and negative emotions) (McAuley et al., 1983). McAuley et al. (1983) state that outcome dependent emotions, no matter the perceived cause of the outcome, will produce displeasure when failure is experienced. Emphasizing winning and losing, which are outcome goals in sports may be correlated with unhappiness. Attribution-dependent occur when specific causal attributions are made for the failed outcome.

McAuley, Russell, and Gross (1983) explored the attributions made by athletes in the contexts of winning and losing. McAuley, Russell and Gross claim that when one attributes failure to effort, then one will exhibit more feelings of guilt or shame. Athletes who attribute losing a game to being their fault, based on “not giving enough or their all” may experience more

guilt. When one attributes failure to ability, one will experience a feeling of being incompetent (McAuley et al. 1983). The athlete who attributes losing to their skill level may believe they are incapable. McAuley and colleagues also recognize that those who internalize failure, appear to experience more feelings of guilt and resignation, while those who externalize an outcome of failure experience more anger and surprise. When athletes believe that the loss is their fault, they feel guilty; whereas, the athletes who may blame others for the loss may become angry at their teammates or the coaching staff. More positive emotions were exhibited amongst those who perceived their performance was within their control than those who perceived their performance to be outside their control (McAuley et al., 1983). If the athlete has the ability to control their game through a matter of perception then they may experience more positive emotions than others. The difference is placed on the athlete's perception.

Additionally, within the United Kingdom, British athletes experienced negative emotions after a loss. The athletes perceive their coach's reactions to a competition loss as negative as well (Sagar & Jowett, 2012). Sagar and Jowett (2012) found that when coaches have a hostile reaction towards athletes after losing, these athletes also experience personal negative emotions personally. Athletes may be mirroring or taking on the negative emotions from the coach. Coaches may express themselves after losing in the following ways: shout and swear after a loss, throw things, ignore the athletes or blame the athlete (Sagar & Jowett, 2012). The athletes were found to then experience disappointment, anger, annoyance, upset, unhappiness, embarrassment, guilt, fear, frustration, anxiety, dissatisfaction with the coach, hurt, lack of motivation, feelings of letting the coach down, and contained a decrease perception of self (Sagar & Jowett, 2012). Again, athletes reacted to the coach's display of negativity after the loss of a game, influencing the athlete to feel a variety of negative emotions. Similar results are found

when athletes are threatened and punished by coaches after a competition loss (Sagar & Jowett, 2012). Athletes described feelings of failure, worthlessness, talentlessness, and a loss of self-confidence (Sagar & Jowett, 2012).

Loss and Cognitions

In a study by Arathoon and Malouff (2004), 68 female field hockey athletes who did not lose were found to display more positive thoughts and coping strategies and a decrease in positive affect (Arathoon & Malouff, 2004). A meta-analysis by Arathoon and Malouff identify limitations that support the claim that negative affect and stress occur in males who play soccer, squash, and football, after losing competitions. Only one study was found to include females. This study found a decrease in negative affect following multiple negative events that happened to include sports loss as a negative life event (Arathoon & Malouff, 2004). Many studies only explored the experience and behaviors of male athletes, again limiting the knowledge for all athletes and their experiences with competition losing.

In some studies sports loss, was not the most important focus. It is evident that expanding the research in the given population of athletes who experience competition loss is necessary to better advance the field of sports psychology. Limitations in the previous study by Arathoon and Malouff (2004) show how other factors could have contributed to athletes' decreased affect; other aspects could have contributed to the increase of scores, and possible may have distorted results gathered from participants (Arathoon & Malouff, 2004). Knowledge of being a part of an experiment could also had an effect on the data provided. One group could have tried harder due to knowing which group they were in, controlled or experimental (Bordens & Abbott, 2014).

Theoretical Conceptualization of Winning and Losing

Evolutionary Model. Sloman et al. (2011) express the need for advancing the new evolutionary model that explores the relationship of winning and losing and its effect on mood and physiological variables. Sloman et al (2011) proposed that by succeeding, one experiences an involuntary winning strategy (IWS), and one would have an increase of joy and self-confidence. The more the athlete wins, the more joy and self-confidence they may experience. The broader exploration of winning and losing amongst animals and humans implied that because animals expressed negative symptoms after losing, humans would suffer from similar symptoms.

Results presented in the article, *Evolution Approach to Mood Disorders* by Sloman et al (2011), support that whether the subjects are animals or humans, dysphoria was displayed more, as well as the display of more hostile symptoms, and the presentation of less anxiety and less positive affect was found after losing. Winners present themselves as fighting harder enjoying their prize while losers de-escalated and decided to give up (Sloman et. al., (2011). Sloman and Stuurman (2012) found that student athletes that shows a decrease in hostility, dysphoria, and anxiety with an increase of positive affect after winning, and also showed that those student athletes expressed feelings of superiority. The evolution of an involuntary defeat strategy (IDS) evidences the possibility that losers may have experiences of inferiority, unworthiness, withdrawal, low self-esteem, a loss of libido and contain other features of depression (Sloman et al., 2012). Those who lose may not continue in the competitive struggle or return or even attempt return to the former status (Sloman et al., 2011).

Sloman and Sturman (2012) posit that how one accepts defeat is related to depression. Usually one submits or flees prior to depression setting in which hinders the feeling of defeat. This then allows one to continue towards new challenges after a battle. However, when this involuntary defeat strategy (IDS) is not appropriately deactivated then one becomes maladaptive. Applying this concept to sports, if an athlete is experiencing defeat then they may feel inferior and have lower self-esteem and give up prematurely to in a game to return to former feeling that were exhibited when at a higher status of winning. How the athlete perceives the loss may relate to the onset of depression. If the athlete decided to give up before feeling depressed then they may have a better chance of engaging in another game. Whether an athlete becomes maladaptive in their behavior may be dependent on not being able to submit prior to depression or experiencing the negative feelings of inferiority or unworthiness.

Maladaptive Cycle. The IDS and IWS suggested by Sloman et al. (2011) explain that a person can develop hypomania and a maladaptive cycle after losing. The maladaptive cycle when one is losing is explained as such: there is an entrapment of continuing to lose, then one experiences mounted frustration, an increase in anger, and this prolongs the involuntary defeat strategy, where one feels hopelessness, experiences self-criticism, and shame and finally one falls into clinical depression (Sloman et al., 2011). An athlete can get stuck in a maladaptive cycle through engaging in a losing season; anger, frustration and depression are not addressed. Eventually, the athlete becomes hopeless and criticize themselves and feel ashamed. Sloman and Sturman (2012) claim that there is a continuum between the adaptive and maladaptive cycle and the maladaptive cycle is related to an increase in negative mood and a decrease in self-esteem.

An athlete may be more vulnerable in the maladaptive cycle due to mood and decreased sense of self. Sloman and Sturman (2012) also state that those who may have experienced a lack of

nurturing and/or constant failure and cannot move up the continuum towards an adaptive cycle, then he or she may experience an increase in the vulnerability of anxiety and mood disorders. An athlete with a mood disorder could be developed through a lack of support from family or the coaching staff and the constant experience of losing.

Family Theory. Sloman and Sturman (2012) claim that failures in life may lead to dysfunctional patterns in family interactions. As previously stated, due to a decrease in dysphoria, anxiety, and hostility and the increase of self-worth after winning, it is claimed by Sloam et al. (2012) that the parent or child generates a more secure attachment within the parent-child relationship. On the other hand, the opposite effects may occur when one loses; then a more insecure attachment is promoted within the family (Sloman & Sturman, 2012). Winning and losing may affect the treatment, support, nurturing, and safety that the family may provide, specifically between the parent and child.

Dix et al. (as cited in Sloman & Sturman, 2012) discuss that an adaptive cycle causes success and leads to more success. On the other hand, within the maladaptive cycle, depressive symptoms increase, thus leading mothers to display less supportive behaviors towards others. Furthermore, Sloman and Struman (2012) found that mothers who are unable to cope with repeated losses or a single major loss may weaken their ability and experience failure in comforting the anxious child (Sloman & Sturman, 2012). When the IDS is triggered, Sloman and Sturman (2012) report that people become vulnerable and choose to protect themselves. This is done through not admitting defeat and putting others down to increase their status. This in turn allows one to make no effort to win or succeed and produce unproductive power struggles,

impose discipline on their children and include the child in marital conflict (Sloman & Sturman, 2012).

Biological Theory. There are a few biological factors that may explain these negative effects of losing. McGuire et al. (2000) found a correlation between serotonin and high social status in both humans and animals. Sloman et al. (2011) suggested that testosterone increases after a victory and therefore defeat may depress testosterone. Sloman et al hypothesized that an increase in testosterone allows athletes to increase their energy and continue to prepare for new competitions. An increase in testosterone in games may account for some competition aggression. This hypothesis was shown in mice that won, who thus experienced an increase in testosterone and continued to win in the future (Sloman et al., 2011). The same could then be hypothesized with defeat and athletes. If an athlete experiences defeat and their testosterone lowers and their preparation for future challenges are lowered, then this may continue a cycle of losing and possibly increase the negative effects and emotions previously discussed.

Moreover, it is important to gain a better understanding of the biological mechanisms and evolutionary functions of winning and losing, as it allows for a more useful overall frame of reference, and direction in the field, and allows one to understand how families can function in a maladaptive way (Sloman & Sturman, 2012).

Personality in Sports

Cox (2007) questioned the role of one's personality profile in sports when experiencing a competition loss. Dobersek and Bartling (2008) found that athletes who were involved in individual sports were more egocentric than those not part of a team; and that females believed they had more social competence than males. Introverts have been found to be more competent in forming imagery, and extraverts were better at memory performances, internal cues versus objective external cues (Dobersek & Bartling, 2008). Although conclusions from Dobersek and

Berling study may be slightly inaccurate, due to the study being skewed because of the sample representing more women, neurotics were found amongst the athletes participating in team sports compared to individual sports (Dobersek & Bartling, 2008). Mental stability was needed for those participating in individual sports; individual sport athletes do not have the same support system as those who are part of a team. So, athletes who engaged in individual sport have been found to possibly be more stable, independent and secure (Dobersek & Bartling, 2008).

Kroll and Crenshaw (as cited in Cox, 2007) compared football players, wrestlers, gymnasts, and karate athletes and found significantly different personality profiles. Football players and wrestlers contained similar personality profiles compared to gymnasts and karate athletes (Kroll & Crenshaw as cited in Cox, 2007). Another study conducted by Singer (as cited in Cox, 2007) found a difference between team sports and individual sports, baseball players were compared to tennis player when exploring personality variables. Athletes on team sports expressed more anxiety, dependence, were more extraverted, more alert and objective, than athletes in individual sports (Cox, 2007).

Are these findings consistent with all athletes after experiencing a loss? Are their certain personality traits related to negative emotional reactions to competition loss? Will athletes in individualize sports have similar personality profiles or traits and experience negative emotional reactions after a competition loss?

Personality can be described using a five factor (FF) influential approach. The FF approach states that personality can be identified within basic dimensions through factor analysis that describe traits (Francic, Borsboom, Dolan & Boomsma, 2014). Structured questionnaires using Likert scales are commonly used as personality inventories. The NEO Five Factor Inventory (NEO-FFI) is a shorter version of the Revised NEO Personality Inventory (NEO-PI)

and is used with college students, men and women, and are available in English, German and Chinese languages (Cox, 2017; McCrae & Costa, 1991). The (NEO-FFI) is used to measure the Big-Five dimensions such as: *extraversion*, *neuroticism*, *conscientiousness*, *openness*, and *agreeableness* (Cox, 2007; McCrae & Costa, 1991). Although, the personality trait *neuroticism* has been studied with college students and other adults of various ages, it is important to assess one's profile again after the age of 30 as research claims possible changes in personality after this age (McCrae & Costa, 1991). The trait contains stress reactions and coping behaviors consistent with the topic at hand. *Neuroticism* consists of anxiety, angry hostility, depression, self-consciousness, impulsiveness, and vulnerability and given certain circumstances this could be further beneficial information as it is used in medical and clinical settings (McCrae & Costa, 1991).

Although the personality trait *neuroticism* has been studied with injured athletes, the trait contains stress reactions and coping behaviors consistent with the topic at hand. *Neuroticism* consists of anxiety, angry hostility, depression, self-consciousness, impulsiveness, and vulnerability (Cox, 2007) and given certain circumstances this could be further beneficial information to sport medicine personnel if knowledge gained (Pargman, D., 2007).

Hervas & Vazquez (2011) describes neuroticism as generally consisting of negative affect and emotional problems. Pargman, explain such emotional problems as much more frequent. High neuroticism was associated with intensified negative affect, the frequency negative emotions, and the over producing of various negative emotions (Hervas & Vazquez, 2011). Found by Bogler and Zuckerman (as cited in Pargman, 2007) high neuroticism was associated with more daily living conflict, more interpersonal problems, greater stress exposure, and greater reactivity to stress. Hervas and Vazquez also claims that various clinical disorders

contain the element of neuroticism, may be associated with the increase in one's vulnerability to depression. High neuroticism is also associated with rumination (Hervas & Vazquez, 2011).

High neuroticism is also associated with maladaptive behavior causing one to display inappropriate anger (Pargman, 2007). Pargman (2007) found that, neuroticism correlated to aspects given: impatience, irritability, hostility and relying on insufficient coping strategies, avoidant-oriented and emotional oriented coping strategies; such coping strategies consist of denying, escaper into fantasy, withdrawing, being passive, blaming oneself, wishful thinking, being indecisive, emotional focus/venting, sedation, and mental/behavioral disengagement and may cause one to have a much higher adjustment problems to health problems. Hostile outbursts are discussed as associated with those with neuroticism and puts tension and pressure on relationships especially the patient and health professional causing the patient to withdraw from support (Pargman, 2007).

Treatment

Sloman et al. (2011) notes some implications for therapy. Sloman et al. also discuss the relationship of increased serotonin and social status rankings in male monkeys after winning. Sloman and colleagues compare findings to human sports icons. Discussion by Sloman et al., explained how both humans and monkeys benefit greatly by and compete for social status, food, and territory. Hierarchy is discussed as gained in all fields of endeavor. The more one succeeds, the higher they placed in the hierarchy. Sloman and Sturman (2012) states that winning promotes survival and reproduction success in the early man, but it also effects other family members as well.

Aberman (as cited by Vascellaro, 2017), a sports psychotherapist, helps athletes perform to the max of their potential and tries to get them to notice that thoughts and emotions impacts

them positively or negatively. Aberman also states that it is key to have athletes focus on the process, rather than the outcome of the game. Athletes may want to generate more process goals of grabbing 10 rebounds in a game, for example, rather than setting goals of wanting to win the game. It's important for an athlete to know that one single athlete can make a difference on even a sizable team as emotions may be contagious (Aberman, as cited by Vascellaro, 2017).

Athletes attitudes and emotions can be passed through a team quickly, others mimicking such emotions as they do with their coaches, as previously discussed. Aberman claims that changing and managing moods of one's organization is more important than fixing any difficulties on the team.

There are a variety of interventions used in sports when coping with stress in sports. Self-talk increases the athlete's self-confidence, build and develop self-efficacy, to create and change the athlete's mood, focus attention and concentration, as well as help contain the athlete's efforts (Cox, 2007). Progressive relaxation is claimed by Edward Jacobson, that anxiety cannot be maintain psychologically if the body is relaxed (Cox, 2007). This technique to relax body muscles were to address nervousness and tenseness in the muscles within competition play to increase or maintain performance (Cox, 2007). Autogenic training also focusses on the relaxation of the body, emphasizing sensation of warmth and heaviness in the limbs (Cox, 2007). Biofeedback (voluntarily in control of body functions) and meditation (control attention) were also explained as effective interventions for athletes (Cox, 2007). Whether the athlete is talking to themselves or relaxing their bodies, most techniques listed are to be utilized during competitions to directly affect performance. Mindfulness is also currently used in sports to

address burnout and produce optimal performance for athletes.

Jouper and Gustaffsson discuss the importance of mindfulness to recreate the athletes functioning and well-being (2013). It was found that as stress increase, then the energy decreases (Jouper & Gustaffsson, 2013). As research focused on female shooters over a span of 30 to 50 weeks, mindfulness was used to address burnout amongst these athletes and to increase awareness in the areas of thoughts, emotions and sensations within the body (Jouper & Gustaffsson, 2013). Furthermore, Scott-Hamilton, Schutte, Brown explored if mindfulness can affect an athlete's "flow," affect anxiety and pessimism, given an eight-week training (2016). Flow was defined as a freedom physical and mentally, freedom from negative thoughts, a creation of a purposeful and meaningful experience, with no evaluation of the self to generate a peak performance (Scott-Hamilton et al., 2016). Anxiety was described as competition anxiety and pessimism being the athletes focus on thought permanence, thought regarding universality, and thoughts consisting of internal causes (Scott-Hamilton et al., 2016). Anxiety was found to not have lessen. Pessimism did decrease slightly amongst athletes, but was not considered significant (Scott-Hamilton et al., 2016). Major limitations were, studying a small group of cyclist, the attrition decreased within the control group, and the difficulty in studying the concept of flow (Scott-Hamilton et al, 2016). What if significant issues faced by the athlete could be measured completely and the intervention of mindfulness can have specific effects given each assessed issue?

Programming and the Logic Model

The logic model allows the facilitator to collect, analyze and produce ongoing data. The evaluation process is built for one to continuously learn and improve upon the program focusing on ones intended results. It allows the facilitator to separate planned work, what one would like to do, considering the populations issues, from intended work, what one expects to

happen based on given activities. The intervention program created, given assessments and mindfulness techniques, are embedded in the activities component of the model. The model helps explain why the intervention may or may not work, through closely looking at expected work from one to 10 years. The use of this model may be new within this population; however, a model was needed to be used to address planning and evaluations to generate appropriate adjustments where needed.

Case Examples

Coaches and athletes are effected by losing within sports from Pee Wee leagues to professional sports, and have a more than wanted familiarity with losing (Rhoden, 2001). Coach Sutton, whose had various losing seasons in sports, describes his experience as a weight on his back, like carrying a gorilla, a sense of heaviness, that continued to get heavier with every loss. He described himself as getting bitter and creating enemies that did not exist. He left for his own personal growth and had to change himself to not want to perceive as if he is fighting daily (Rhoden, 2001). Losing can put this weight on one's shoulders that the coach or the athlete has created within their minds based on perception. Ones perception after losing can negatively influence other areas of one's life.

In another instance, which includes Camron Newton, the famous football player reacted to his super bowl loss and generated a massive media response. In an article by Jones (2016), it questions if one could handle their reactions better to a super bowl loss by reframing from sighing and giving mostly one word answers, as well as abruptly walking off the podium after only three minutes of media time. After facing the hardest loss of his career, Newton followed this display of unsportsmanlike conduct with "scowling" in the locker room with regard to his super bowl 50 loss reaction, Camron Newton expressed how things didn't go as he planned, even

after much sacrifice and time invested. His emotions were overwhelming, which caused others to criticize him. He questioned others criticism based on how one should react after a loss and recognized himself as having patterns of not taking losing well in the past. He further stated how nobody liked to lose; and if one was good at losing then they were a loser (Newton, 2016).

As a final example, tennis player Ryan Harrison destroys four of his rackets during game play and completely loses his tennis match. Harrison allows his frustration and anger to boil up repeatedly and vividly shows signs of aggression on the tennis court (Barry, 2017).

Previous studies integrated and presented in this literature review provide more of an evolutionary approach and theories on the effects of losing. Again, very few studies have been conducted that focus on the negative effects of competition loss amongst student athletes. As previously stated, although there is limited exploration of the relationship between losing in competitive sports and its effect on athletes, there is enough reason to believe that there is a negative correlation between losing and positive affect (Arathoon & Malouff, 2004). This project hopes to provide information that can be used to enhanced or refine one's current knowledge about competition losing, add to one's understanding about the effects of losing, and become readily utilizable by involved stakeholders and collegiate athletes. It includes a proposed intervention to help support athletes that struggle with competition loss.

CHAPTER III

Mindfulness Training Using the Logic Model

Athletes mood states and personality traits have been studied within the field of psychology mainly focusing on pre-competition situations and optimal performance. Mood states and personality traits have also been heavily researched and studied in relation to injuries and rehabilitation amongst athletes. There is limited research that focuses on losing within the culture of sports; the focus mainly being on the outcome goals of winning. There is enough research to conclude that after the loss of a competition, athletes have various reactions including anger, aggression, depression and/or anxiety. These negative emotions and aggressive behaviors can have negative effects on not only on the individual athlete, but also on the teammates, coaching staff, or even one's family. This paper explored the experiences amongst athletes who have lost in competitions and presented the personality type of neuroticism to best help explain such expression of losing.

Rational for the Model

The model being used is the Logic Model allows one to evaluate a program through a collection of data (observations/assessments and feedback), an analyzation process (closely examining scores/feedback), as well as produce ongoing data throughout the program. The evaluation process is built for one to continuously learn and improve upon the program focusing on ones intended results. This model helps one break their plan down into what works for their program and evaluate why it may or may not have worked. Due to this being a new program for such a population, it is important to use a model with effective program planning techniques,

with a focused and detailed implementation and application processes, and an evaluation portion for appropriate adjustments (W.K. Kellogg Foundation, 2004).

Mindfulness built into the proposed Logic Model is needed to help bring awareness and attention to athletes to best address their current issues (Davis & Hayes, 2011). Davis and Hayes (2011) and Pollak, Pedulla, and Siegel (2014) discussed how there is not one meditation practice/technique that fits all. Instead one should use different meditation styles, as various meditation techniques are needed for different people. Athletes who experience loss negatively, do in different ways and may a variety of meditation techniques to support them.

The main focus of the intervention proposed is on the team that includes athletes who all experience losing differently. The Logic Model allows for such various mindfulness techniques to be integrated, included and evaluated separately to view its effectiveness individually. Davis and Hayes (2011) claimed that mindfulness based psychotherapy can be beneficial by decreasing psychological distress, depressive symptoms, rumination and negative affect. It could also increase one's self-acceptance, compassion, satisfaction with life, and overall sense of wellbeing (Pollak, Pedulla & Siegel, 2014); all are important areas in an athlete's life. The use of the Logic Model can allow for adjustments to be made in the mindful training program for athletes, to best help with negative emotions or aggressive behaviors.

The mindfulness training program may be useful and effective. Mindfulness training is an evidence-based practice that is effective within the sports culture currently. Assessments given prior to intervention can identify emotions and reactions appropriately and gauge any significance changes through standardized and scientific based protocols. Assessments given within this program could be useful during the data collection and evaluation process. A collection of data can support the significance of issues and provide evidence necessary to gauge

if such interventions are working. When an athlete loses, his or her cognitions are affected, emotions are affected, and relationships amongst the coaching staff, teammates and families are affected; mindfulness has the ability to address all areas. Everyday life skills and activities, like class attendance for the student athlete, are also affected by a competition loss. Davis and Hayes (2011) stated that the research of mindfulness use amongst those who had chronic mood disorders, anxiety, depression and physical illness show lowered scores by self-report in these areas after the use of mindfulness techniques. Mood disorders, anxiety, depression and physical illness are areas of focus necessary to create a healthier and more positive team. If this integrated mindfulness based training was introduced to sports organizations, the culture of losing within sports may change; fans may have a better understanding the athletes experience, athletic directors could address the removal of coaches and athletes based on character and not wins or loss stats; and athletes would present a calmer state. This program could change the perspective of losing within the sports world.

Theoretical Foundations

Sloman and Sturman (2012) addressed the involuntary winning strategy (IWS) and the involuntary defeat strategy (IDS) theory as the relationship of winning and losing effects on one's mood. Winners presented themselves differently from those who lost and produced more joy, and self-confidence, a decrease in hostility, dysphoria and anxiety and fought harder. Those who lost de-escalated and decided to give up, due to feelings of inferiority, withdrawal, and low self-esteem. Those who lost, fled or submitted prior to depressive symptoms arising, which may hinder feelings of defeat. One then continues to battle, due to not quite feeling defeated, then the IDS may be reactivated. Due to not appropriately addressing the IDS, then one falls into a maladaptive cycle (Sloman & Sturman, 2012). Sloman et. al (2011) discussed the illnesses of

hypomania and depression that becomes activated when one is trapped in losing. Frustration increases, anger increases, and feelings of hopelessness sets in; and one experiences self-criticism and shame. Athletes may find it harder to move towards the adaptive end of their continuum when such symptoms arise; there is an increase in the vulnerability to anxiety and mood disorders (Sloman & Sturman, 2012).

Cognitively, athletes evidenced the negative effects of stress after losing a competition; and those who won reported more positive thoughts and coping strategies (Arathoon & Malouff, 2004). Furthermore, when focusing on affect and failing, one feels guilt and shame when one believes that failure was due to effort compared; feelings of incompetency was found when failing was attributed to ability (McAuley et al., 1983). Moreover, when one focuses on the interactions between the athlete and the coach after losing, Sagar and Jowett (2012) found that coaches' hostile reactions influenced the athletes' negative emotions. Sagar and Jowett also found that when coaches have a hostile reaction towards athletes after losing, athletes experience the negative emotions personally. When coaches shout and swear after a loss, throw things, ignore the athletes, or blame the athlete, athletes experienced a decrease in their perception of self (Sagar & Jowett, 2012). Finally, testosterone was suggested to increase after a victory and thus defeat may depress testosterone (Sloman et al., 2011). Sloman et al. (2011) hypothesized that an increase in testosterone allows athletes to increase their energy and continue to prepare for new competitions.

Personality, using the Five Factor (FF) approach may also have an influence on the reaction of certain athletes to competition loss. High neuroticism was described as one's inability to deal with stress, worrying, apprehensive, tense and easily frustrated (McCrae & Costa, 1991). Pargman (2007) describes this trait as a common feature of those with anxiety and

depression; the person ruminates, displays inappropriate anger, irritability, hostility (outburst), and relies on insufficient coping strategies. The coping strategies often seen among those in this group are withdrawal, self-blame, passivity, wishful thinking, disengagement mentally and/or behaviorally, and a withdrawal from support, just to name a few (Pargman, 2007).

Core Assumptions

The main core assumption is that athletes ignore their emotions after a competition loss. Though athletes may try to ignore their feelings, such feelings may resurface during post-game interviews, within the locker room, or during discussions with the family at home. When such feelings resurface, they may not be adaptive or healthy for the athlete or their relationships. As a response or reaction to those feelings, the athlete may become more verbally aggressive or even physically aggressive; one may cry excessively or isolate. Shame and guilt, hopelessness and anger, depression, low self-esteem, low self-confidence and a negative self-concept should not be ignored or buried after a game. If athletes get caught in IDS, then it is assumed that such negative feelings were not addressed; the athlete remained in the maladaptive cycle that continues the negative feelings and reactions.

Another core assumption of this proposed intervention is that athletes may get lost in their thoughts, and experience a lack of concentration due to thoughts about the previous game. The altered cognitive state of the athlete may affect their ability to experience the here and now; they may become lost from what they are supposed to be doing immediately after losing a game. When an athlete loses a competition, their thoughts tend to become more negative and if one loses the present moment of the mind, they can become stuck in the content of the past. This tendency may limit the athlete's ideas for positive coping strategies and increase negative thoughts. Furthermore, the athlete who acts out from a place of negative emotions may act

aggressively or angrily without thinking; their actions become compulsive or impulsive. When athletes or coaches react aggressively, as when a coach acts with hostility towards his or her athletes immediately after the game, there is not much thought towards behaviors. Shouting and swearing prevents the coach or athlete from pausing and considering their response and the coach or athlete becomes more reactive.

One final assumption is that the mental health professional who aids in these circumstances would be competent and would have utilized the proposed techniques prior to guiding those involved through the integrated mindfulness technique phases. This Mindfulness Training Logic Model provides a means to develop a nonjudgmental and accepting attitude, increasing self-awareness and a mind that is in the present moment. There will be an increase in consciousness, an increase in the focus of the here and now that can occur immediately after a game.

The Mindfulness Training Logic Model Overview

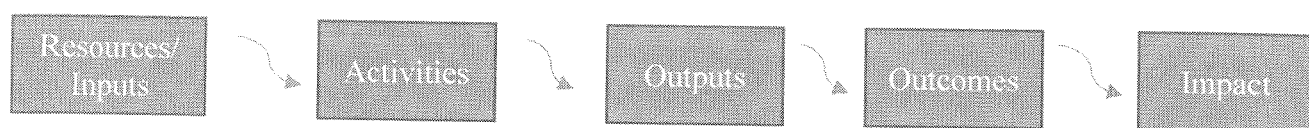
The Logic Model as described by W.K. Kellogg Foundation (2011), allows one to create a program theory that fosters change and a sound knowledge of what works within the program. This model focuses on the problem or issues of the population, program, and the needs of the community, influential factors, assumption, actual strategies and results. The model provides the relationship between the planned work and the intended results of the work. It shows the relationship between the resources needed to start the mindfulness based training with athletes, the specific activities of the mindfulness training, the outputs, outcomes and impact of the activities provided, so that one can continuously modify or evaluate the program's effectiveness.

The model is a frame of how one believes the mindfulness training will work within a specific sequential order.

Figure 1 Model Overview:

Planned Work

Intended Results



Core Components/Elements of the Mindfulness Training Using Logic Model

The core components of the mindfulness training within the logic model are resources, activities, outputs, short and long-term outcomes and impact. Resources are described as what needs to be accomplished for activities to be provided (W.K. Kellogg Foundation, 2011). Resources include athletic directors, acknowledging the impact of losing amongst student athletes and the need of mental health services. This may require an increase in hiring mental health therapists and psychologists in sports programs. Other resources needed to provide such activities, are often found in athletic organization or identified by individual athletes and coaching staff who experience competition loss. A battery of assessment tools that help identify and gauge the significance of the negative effects amongst athletes are also included in the resources needed. And finally, a mental health professional dedicated to mindfulness training and the desire to change the sports culture with regard to the aspect of losing is also needed.

Activities were described as what one will do to address the given problems and issues (W.K. Kellogg Foundation, 2011). The activities within this program include: assessments for athletes

and the provided integrations mindfulness based psychotherapy given in a group setting. Each student athlete would be provided with a sports battery of assessments to gauge the athletes baseline re: depression, anxiety, aggression, and anger, which is a battery presented as a group that currently does not exist as a packet. After the student athletes first experienced a competition loss or most significant loss, or a completion of eight week using mindfulness (whichever comes first), then the mental health professional would provide another battery, providing a minimum of two within the sports season. Mindfulness techniques must be given in-between assessments.

The battery of assessments that would be provided include: *Profile of Mood States* (POMS; McNair et al., 1992), *Competitive State Anxiety Inventory-2* (CSAI-2R; Wiese-Bjornstal, Martens, and Russell, 2003), *Buss-Perry Aggression Questionnaire* (B&P; Buss & Perry, 1992), and *Five Factor Inventory* (NEO-FFI; Cattell) (Cox, 2008). If access to these assessments are not available, then other assessments that measure depression, aggression, anxiety, anger and personality traits are acceptable.

The Revised NEO Personality Inventory (NEO PI-R) is a 48-item neuroticism five-point subscale that offers six different aspects and separate scores. These include: anxiety, self-consciousness, impulsiveness, vulnerability, angry hostility, and depression. Participants would be given the Five Factor Inventory (NEO-FFI) as it is a shorter version of the Revised NEO Personality Inventory and takes 10-15 minutes to complete. The NEO-FFI contains 60 items with 5 subscales, which are neuroticism (N), extraversion, (E), openness (O), agreeableness (A), and conscientiousness (C). Responses provided on the inventory are on a 5-point scale ranging from “strongly disagree” to “strongly agree” (strongly disagree, disagree, neutral, agree, strongly agree) (Francic et al., 2014). Sample items read as such for this scale “not a worrier,” “feels

inferior,” “goes to pieces under pressure,” “rarely lonely or blue,” tense, jittery,” “feels worthless,” “rarely fearful or anxious.” The Competitive State Anxiety Inventory-2 (CSAI-2R)/ The Sport Anxiety Scale (SAS) are measures of traits like competitive anxiety, somatic anxiety, cognitive anxiety, and cognitive disruptions. Participants would be given the Revised Competitive State Anxiety Inventory-2 (CSAI-2R) as it is the shorter version of the Competitive State Anxiety Inventory-2 (CSAI-2). The CSAI-2R is a 17-item measure of cognitive anxiety (5 items), somatic anxiety (7 items), and self-confidence (5 items). Participants respond to the statement: within the moment (Cox, Martens, & Russell, 2003). The Beck Depression Inventory II (BDI-II), which is an objective measure of depression/ the Profile of Mood States (POMS), which measures depression as well as predictors of staleness (Wiese-Bjornstal & Ray, 1999; Terry & Lane, 2000). Participants would be given the Profile of Mood States (POMS)-Short version as it the shorter version of the Profile of Moods States (POMS). The POMS-short version is a 30-item instrument that measures six mood states. The six mood states include: tension, depression, anger, vigor, fatigue, and confusion (Cox, 2008; Terry & Lane, 2000). There is only the positive mood state construct of vigor as all other states are negative in nature (Terry & Lane, 2000). Participants will be given the Buss-Perry Aggression Questionnaire (B&P). The B&P is 26 items that measures physical aggression (9 items), emotional aggression (4 items), anger (6 items), and hostility (7 items) (Safraoui, 2014). The B&P is a 5 point Likert scale ranging from “extremely uncharacteristic of me” to “extremely characteristic of me” (Safraoui, 2014). The Trait Sport-Confidence Inventory and the State Sport-Confidence Inventory is stated as measures of an athlete’s belief concerning their ability to be successful in sports.

Within the mindfulness training portion of activities provided, athletes would create flash cards like business cards with positive affirmations on them. Rooms within locker rooms or the dry erase boards would be designed with positive affirmations for the viewing before and after games. Athletes would then go through a series of integrated mindfulness techniques, which include: touch points- not feeding into anger technique, apply awareness of sensations technique, the labeling emotions technique, offering loving and kindness to oneself, working with difficult persons, the four elements meditation and accepting the challenge techniques. Again, activities would be given preferably as a group, sequentially, and immediately after a game that one lost.

Outputs were stated as once the activities are accomplished they will produce given evidence (W.K. Kellogg Foundation, 2011). Davis & Hayes (2011) stated what to expect from each activity provided, as in what each technique should produce. Assessments and mindfulness are expected to decrease ruminating thoughts, anxiety, or symptoms of depression experienced amongst athletes and a noticeable decrease in their negative affect and behavioral reactions after a loss. Pollak et al. (2014) described how certain techniques have specific benefits. Providing flash cards or writings on the wall provides support and encouragement whenever and wherever the athlete may be. It also reminds the athletes to be attentive and how to remain in the here and now. Touch points and sensations help with enduring and accepting strong emotions by calming the mind and decreasing anger and anxiety. Labeling emotions will produce identifiers, and balance, and change the athlete from being reactive. Offering love-kindness to oneself allows one to replace negative labels or thoughts about oneself and can also be used in various settings. Working with difficult people would change negative feeling and interactions between coaches and athletes. The four elements would provide balance after an upsetting and challenging situation, like a significant competition loss. And finally, the accepting the challenge

technique/activity could produce some different perspectives amongst athletes and coaches and provide for the opportunity of growth within the individual person (Pollak et al., 2014).

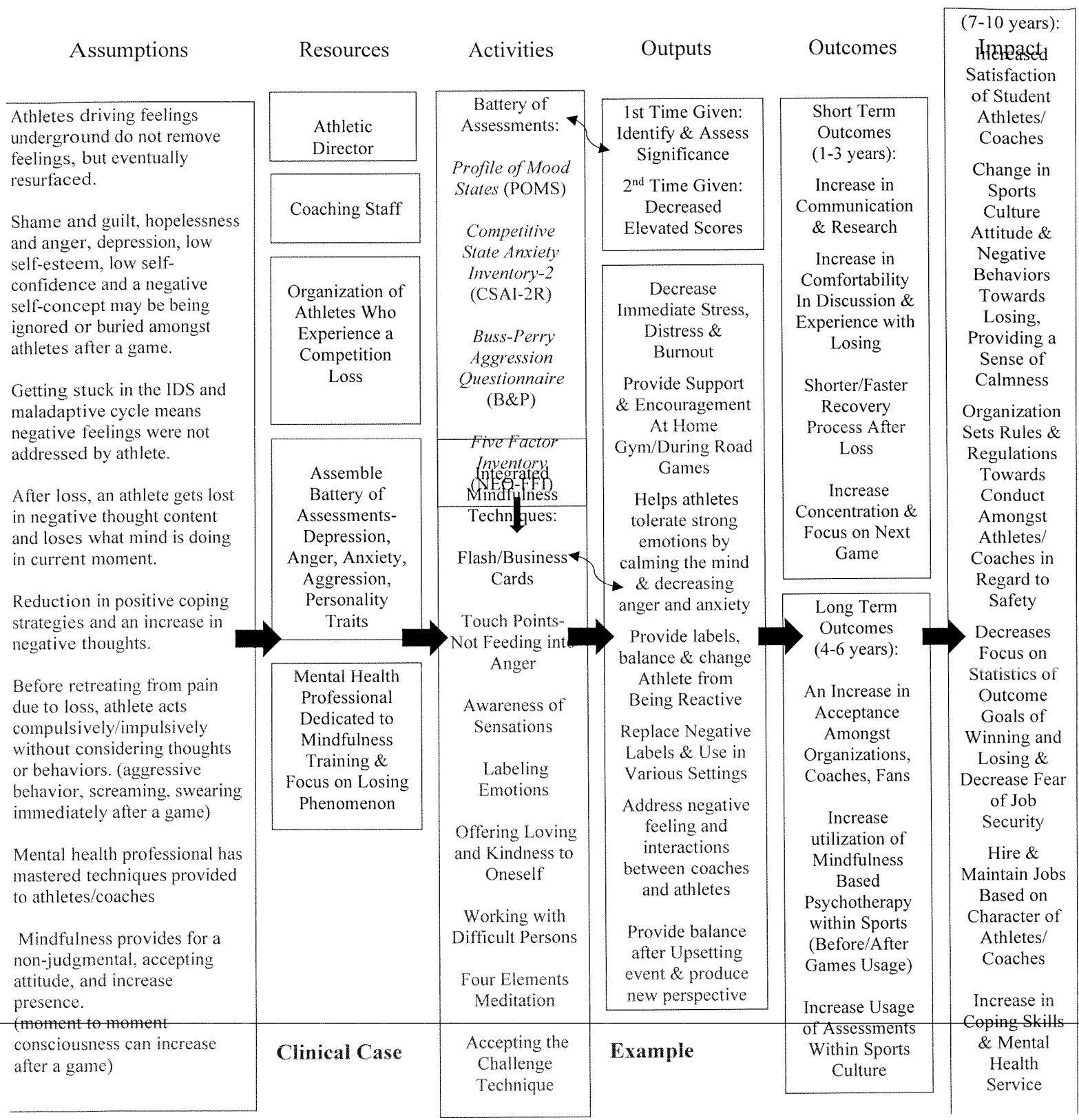
Short term and long-term outcomes are described as changes expected after one to three years and also changes expected from four to six years if the activities were accomplished (W.K. Kellogg Foundation, 2011). Immediately, it is expected that there will be an increase in communication and possibly research regarding negative emotions/behavioral reactions experienced by an athlete who experience losing. There may be an increase in comfortability when discussing or experiencing a competition loss amongst athletes and coaches. One could also expect an increase in the team's ability to recover from losing at a faster rate and an increase in concentration to move on and focus on playing the next game. Fans and coaches, or organization may be more accepting of athlete's reactions as they can now be labeled, understood and treated appropriately. There could be an increase in the use of mindfulness based psychotherapy within the sports culture (before and after games). There also could be an increase usage of assessments amongst collegiate athletes which allows a mental health professional to catch significant difficulties of an athlete earlier.

Lastly, the impact core component, was stated as expectations within seven to ten years after produced interventions (W.K. Kellogg Foundation, 2011). It is expected to have an increase of satisfaction amongst student athletes in college. There could be a change within the cultures attitude and behaviors regarding losing. Athletes and coaches may no longer express anger or aggression the same within sports. There may be a sense of calmness with the culture and organizational rules could be created regarding ways an athletes or coach can conduct themselves after as competition loss regarding safety issues. Coaches and athletes may not focus heavily on outcome goals of winning and losing and possibly may not lose their jobs based

solely on statistic of losing. Athletic directors could also look at the organization and focus on character rather than outcome statistics of wins and losses. An increase in positive coping with competition loss would arise as there is a program or techniques that can finally help. And lastly, an increase in mental health services for student athletes across sports could occur within the seven to ten years due to focused interest.

Figure 2 Model Application Diagram





Resources Component using the Logic Model: *What is necessary or needed to be accomplished for activities/intervention to be provided:*

- Organization of athletes/coaches who experiences competition loss*
- Athletes/Coaching Staff experience depression, anger, aggression, or anxiety after loss*
- Athletic Director who recognize poor coping within organization*
- Mental health professional trained in mindfulness and interested in focus on losing experiences within sports*

The College of Hawaii basketball team has been experiencing streaky competition losing, losing some games and winning others in the past few seasons. The coaching staff has a fear of losing their positions due to the statistics of winning and losing within the sports program. As the season opener, the team is flying out to Alaska for a basketball tournament. Despite past season stats the team is excited to open their new season in Alaska and would like to come home with the goal of winning at the statistic value of at least 50 percent. They would like to return to Hawaii with winning at least two games. The island is small, so fans are following the teams progress, watching games, and engaging with the athletes around the island. This is the islands favorite team to watch despite winning statistics. There have been a few troubling issues with some of the athletes “acting out” last season, during school. Athletes periodically did not attend classes or miss assignments after big games. Some athletes go out to the strip and consume alcohol immediately after losing games on the island. There were situations where athletes got into a fist fight with fans on the court while losing by 20 in an important game. The coach tends to scream and yell at his players, calling them names and blaming them for the outcome of games. The coach would break white boards by chopping them in half, breaking game boards over his knee, grabbing players by their jerseys aggressively, and even ignoring them when they

go out to for dinner immediately after games that they have lost. Other athletes, yell at each other in group meetings after games, thinking they are inspiring their teammates, while others walk away and disappear until an hour prior to the next game. Some athletes cry and tend to complain to their families their “miserable college experience,” mainly focusing on the basketball season experience. Athletic trainers focus on the physical aspects of each athlete and report any findings to the coaching staff. The athletes appeared to be physically healthy with no major injuries. Athletes fear they will lose their scholarship if they maintain a losing season. Athletes and coaching staff believe that they have a talented set of players and need just one break out season to show case all talents from coaching staff down to the walk-on athletes.

Activities/Intervention Component within the Logic Model: *What to do to address given problems/issues experienced:*

-Battery of Assessments: POMS, CSAI-2R, B&P, NEO-FFI

-Integrated Mindfulness Techniques: Flash Cards/Business Cards, Touch Points, Awareness of Sensations, Labeling Emotions, Offering Loving and Kindness to Oneself, Working with Difficult Persons, Four Elements, Accepting the Challenge Technique.

The college decided to add a mental health professional, a sports psychologist, to the athletic department proficient in assessments and practices mindfulness regularly in personal life areas as well as in other clinical therapy work. The sport psychologist meets with the coaching staff, the athletes, and athletic trainer to grasp a better understanding of problems and issues amongst the athletes. The psychologist also meets with the athletic director to gain the perspective of the administration running the department. The sports psychologist starts to notice a pattern in problems and issues which appear to increase after competition loss.

Outputs Component within the Logic Model: *once activity provided what will the activity provide:*

-1st time assessment battery given will identify and assess significance of issues

The sport psychologist then provides a battery of assessments after a competition loss, a scrimmage against a nearby college: The *Profile of Mood States* (POMS; McNair et al., 1992), *Competitive State Anxiety Inventory-2* (CSAI-2R; Cox, Martens, and Russell, 2003), *Buss-Perry Aggression Questionnaire* (B&P; Buss & Perry, 1992), and *Five Factor Inventory* (NEO-FFI; Cattell) (Cox, 2008).. The various assessment scores indicated that players on the team experience anxiety, are self-conscious, impulsive, and angry. Most may score high on neuroticism on the NEO Personality Inventory, indicating that they worry, feel tense, jittery, and feels worthless. On the CSAI-2 the athletes indicate that at this moment they have self-confidence issues, cognitive anxiety and somatic anxiety. On the POMS and BDI-II, depression scores were moderate to severe and indicated some muscle tensions, anger, fatigue and confusion. Some athletes question their ability to be successful in sports this upcoming season and scores indicated that some athletes experience physical aggression while other experience emotional aggression and anger.

To reduce symptoms indicated on assessments the sport psychologist will attempt to provide mindfulness based training to the group of athletes as well as the coaching staff:

Flash Cards/Business Cards:

Athletes and coaches collaboratively and individually came up with positive affirmations and designed a flash card/business card that would be taken with them to Alaska. When athletes get to Alaska the coach is expected to write positive affirmations on the board for the team, to offer support and encouragement while on the road to be read throughout visits to the locker

room. At the end of the game, win or lose, the coach and athletes reads their statement out loud. For example, if they lose, the athlete would read: *Wins come off of the lessons learned of loses. A loss is temporary in a pursuit of a win* (Pollak et. al, 2014).

Touch Points Technique:

After the following competition loss, the athletes are told to relax by the sports psychologist and get comfortable in the locker room as they will be guided through their integrated mindfulness training. During touch points the athletes/coaching staff are guided to sit and take a few breaths letting the body settle and the mind settle. Allow the mind to focus on the here and now. The participants are directed to notice how one's body touches other areas. They do this a few times, take a deep breath, stretch, and adjust focus to the next task which is awareness of sensations (Pollak et. al, 2014).

Awareness of Sensation Technique:

During the awareness of sensations phase, the athletes will tune into sounds as they continue to sit comfortably. As the athlete breathes they will focus on each breath and where they feel it within their bodies. Focus on the sounds or one's breath until it physically becomes distracting. The athletes/coaching staff are to identify the pleasant or unpleasant sensation and let them pass, giving no judgements about them. The participants are to bring focus to their reaction to each sensation. After the participants has answered various questions and guidance presented by the sport psychologist the athlete returns to sound or breath and directed not to dwell on any of the discomfort or unpleasant sensations felt (Pollak et. al, 2014). The participants end returning breathing, as the athlete goes through the next phase which is labeling emotions.

Labeling Emotions Techniques:

During the labeling emotions techniques, the athlete/coaches breathes until they are consumed with emotions. Allow warmth and acceptance to arise as the participants labels each emotion and identify where the emotion felt within the body. They are to notice how one is responding to themselves, eventually letting the emotion go. Switch any emotions that are considered negative to warmth and kindness (Pollak et al., 2014).

Offering Loving and Kindness to Oneself Technique:

When ready, the athletes will engage into the next phase, which is offering loving-kindness to oneself. Using their deep breaths as a focus, the athletes will shift attention to any tension or discomfort in the body. Recite kind words to oneself: *this has taught me something. I will be prepared for the next one. My flaws have humbled me.* If one can, engage in imagery, and when ready, take a few deep breaths and transfer such an attitude of kindness into next phase which is working with difficult persons (Pollak et. al, 2014).

Working with Difficult Persons:

The athletes will ground oneself practicing loving and-kindness of themselves. Once one is comfortable with loving and kindness on the self, then move to someone you consider a supporter. Eventually add yourself saying love and kindness phrases using “we” phrases. Take a minimum of 30 seconds imagining a difficult person and offering love and kindness to them and notice how feelings shift and soften. Practice sending loving and kindness to a range of people the participants consider difficult (Pollak et. al, 2014).

Four Elements Technique:

Focus back onto the self before ending and carry such attitude into the next phase of four elements. During four elements, athletes/coaches will breath in and out for a minimum of 5 breaths and imagine images guided by the sport psychologist (mountains, waterfalls, energy of

fire, and sky). The athlete/coaches will pick within each element of earth, fire, air and water they would like to focus on (Pollak et. al, 2014). When done the athletes will complete the final mindfulness phase of accepting the challenge.

Accepting the Challenge Technique:

Finally, participants will complete the accepting the challenge phase of the mindfulness activity. Participants will start a few deep breaths. The athletes will focus on the loss and notice the thoughts, emotions and fears that arise. They will notice any changes in the body. They will use imagery to imagine a considerate, gentle and wise mentor who has shown them real love and care in life. Communicate the game and how it can help you grow as an athlete in your mind with the imagined mentor. Sit with the answers, and look at the game with some different perspectives of development of new skills and strengths. As the athletes goes through the next game with challenges, consider the growth opportunities (Pollak et. al, 2014).

Later within the season, after another competition loss and utilizing the mindfulness technique for a minimum of eight losses, the sport psychologist can assess the program again and take notes of any differences found. The mental health professional is focusing on differences in findings within the assessments battery provided the second time to athletes. Discuss the program with the organization and make adjustments based on needs and feedback of assessments, interviews and information provided by coaches, athletes, or any data gained from outcomes expected.

Outputs Component within the Logical Model: *once the activity/intervention is given what will the activity provide:*

-Decrease immediate stress or distress after losing, provide support and encouragement while traveling, help athletes endure and accept their strong emotions, provide athletes

with labels to feelings and change behaviors from being reactive, use of techniques in various settings, address negative feelings and interactions between athletes and coaching staff, and provides athletes with balance after upsetting competition loss and provide some different perspectives (Pollak et. al, 2014).

The athletes were instructed to practice techniques not only after competition loss, but during other times in personal life when experiencing stress/distress (during finals week/when experiencing homesickness during holiday travels). Using the intervention activity may lower the athletes stress levels, help them deal with the stress of losing better, and allows them to use better coping skills also while traveling during the sports season.

Outcomes Component within the Logic Model: *what are changes expected after 1-3 years and then 4-6 years after use of activities/intervention:*

-Within 1-3 years: It is expected that there be an increase communication and research regarding effects of losing, increase in comfortability in discussion and experiences of losing, shorter and faster recovery process after loss, and increase in concentration and focus on next games.

-Within 4-6 years: It is expected that there is more acceptance within oneself as the athlete, more acceptance as an organization, fan, and coaching staff in regard to losing, an increase in usage of the mindfulness based psychotherapy within sports (before and after games), and an increase usage of assessments within sports population.

The athletes and coaches continue to use the mindfulness activity immediately after games and used more regularly during tournament style games to help calm and generate focus on the next upcoming game. The athletes have the ability to express themselves safely and more positively. The mental health professional was then referred to other sport teams within the

College of Hawaii to assess and help with other athletes who experience negative effects from competition loss. There was an increase in pilot studies that researched competition loss more closely, and adjustments to the integrated mindfulness technique were provided, if necessary, for better effectiveness for the given team. The tennis program at the College of Hawaii removed the mindfulness activity working with difficult person's technique, as athletes did not share the same issues as the previously described basketball team. After games, the basketball players were at calmer states and communicated with each-others and the coaching staff much more positively. The Athletic Director referred the mental health professional to other nearby colleges to help assess and address significance of issues and offer the integrated mindfulness training to others.

Impact Component within the Logic Model: *what are the expected changes 7-10 years after using activities/intervention:*

-Increase in satisfaction with sports season amongst student athletes/coaching staff, a change in sports culture attitude and negative behaviors towards losing (a decrease), a provided sense of calmness after losing, rules and regulations set by organizations towards conduct of athletes and coaching staff in regards to safety, decrease in fear of job security in regards to losing and decrease focus on outcome goals of winning/losing, an increase in coping skills after losing and an increase in mental health services in sports.

The College of Hawaii administrative staff created rules and regulations for athletes and coaches that fines players and staff and provides consequence towards those who react

aggressively and unsafely after a competition loss. An increase in positive coping skills has been taught to various teams and subsequent teams following the pilot study participants and

previously described team that experienced negative effects after losing basketball games. Hiring and firing a coach and athlete became based on the characteristics of the person and not based on statistical values of winning and losing. Fear and anxiety decreased amongst participants as they did not have to worry about job security and focused on becoming the optimal player/coach.

Strengths and Limitations

A few strengths of the Logic Model and incorporating mindfulness into the athletic program acknowledges and addresses the issues and needs of the community who once experienced negativity from competition losing. The Logic Model allows for detailed information to be presented prior to implementing an activity/program. Preparation is well needed and sought out which also increases the effectiveness of a program. Each activity, mindfulness technique, can be assessed individually and there is ample opportunity to adjust one's program based on feedback, due to the structure of the model. Another strength of the model is the must and ability to assess outcomes of short term and long-term expectations (within 1-3 and 4-6 years) and the ability to gauge the impact of ones work seven to ten years after introduced. The model provides for a constant ongoing learning ability across the span of 10 years, to best make appropriate changes if needed or to remove the program completely, if found ineffective.

Mindfulness brings the athlete into present moment of thought and allows one to recover healthily and safely after a competition loss. Mindfulness address specific areas, bring a focus to and provide a balance amongst the athletes' emotions, thoughts, sensations, and the environment, which addresses the problems presented previously. Davis and Hayes (2011) suggest the benefits of mindfulness which include affect, interpersonal and intrapersonal areas. The strength of the use of mindfulness is effective emotional regulation within one's brain and a decrease in

reactivity. Furthermore, rumination, psychological distress, anxiety, and depression have been found to alleviate (Davis & Hayes, 2011). Interpersonal benefits stated, were less emotional stress while relating to others and an increase in identifying and communicating one's emotions within a relationship (Davis & Hayes, 2011).

However, there are further limitations within the mindfulness and usefulness of the logic model. The mindfulness model is complex and the technique chosen may not have been the best or most appropriate, given the developed plan, although it is stated that there is not one best model. The model used is basic, focus on outcomes, focus on highlights activities, and the implementation of a program. Other models, like the theory approach that focus on assumptions, or the activities approach that emphasize and track outcomes, may have been most appropriate. A pilot study is necessary to best find the most effective model, given the population, problems/issues and purpose.

Other limitations are that mindfulness is most effective when applied eight weeks consistently and the intervention being provided would be given periodically, more specifically only after a competition loss. Expected outcomes may not apply as the intervention activity is not provided regularly as suggested to be proven most effective. The length of the actual activity has not yet been tracked, as a pilot study has not yet been conducted, so the implementation time of such activities regarding assessments and mindfulness training could be considered too long. There is a limit of generalizability of such intervention plan, as it may not be as effective for other groups as this population and implementation technique is quite specific. These activities presented may not be as effective within a group setting compared to providing an intervention for individual athletes with issues after a competition loss. The assumptions are broad, and it cannot be made that all athletes will have similar issues after a competition loss and may not

even need such training/intervention. Reactions to losing may not be significant enough to have a need for the program. This is not a controlled experimental study so confounding factors could influence any results (outcomes, short-term/long-term expectations, impacts) received.

Outcomes of the program are gauged through assessment scores, feedback from the participants and observations made by the facilitator. The issue with having one facilitator is that the facilitator may become possibly biased wanting to see benefits of the program which influence outcomes. There is no other objective person to balance findings and notes with. Program may need multiple facilitators. Assessments may provide for practice effects and participants may know what the facilitator is looking for during testing, possibly skewing results. Possibly, when providing second round of assessments, then other assessments that measure the same thing can be provided instead.

Other techniques may need to be taught to the group of athletes/coaches prior to actual implementation of such activities. Simpler practices of focused breathing techniques or meditation with a simple mantra may be just as beneficial and less time consuming. The athletic program may be resistant towards the use of meditation techniques due to a lack of understanding, knowledge, or self-criticism regarding ability to do the techniques. There may be prejudices towards the use of mindfulness.

There needs to be an emphasis on a strong, empathic and warm relationship between the professional/facilitator and the participants. Building that relationship to offer such activities may be difficult. Participants may have difficulty identifying emotions or labeling their emotions. The mental health professional may not know the ability of imagery amongst the participants and may need to provide imagery practices prior to mindfulness training. The use of mindfulness in between games could possibly lower the athlete's anxiety levels too low,

presenting too much calmness before the next game, which also effects effort produced within the following game. Moreover, the personality trait of neuroticism has not been closely studied with mindfulness and may influence results or resistance experienced.

Ethical Considerations

Mindfulness is often misperceived as a religious aspect or a part of a religious culture. It is important for the psychologist to become and remain competent in the mindfulness activities as well as assessments motioned. The mental health professional must explain clearly their roles as the clinician, what to expect and clarify who the client is, which may be the athletic department, the coaching staff, or student athletes. The quality of the implementation is important as it should be standard and consistent throughout application and the use of standardized assessments. Assessments must be current, up to date and secured safely. As the mental health professional, it is one's clinical responsibility to offer and refer the participants to appropriate mental health services if needed. The mental health professional should not cause harm amongst the participants. If assessments or mindfulness cause significant distress to such participants, then the professional should have a plan or course of action of treatment or some on hand referrals to other mental health services for those who may need it. This program may be implemented as a pilot study to review its effectiveness. The participants should be informed that their information collected could be used for research purposes, provide consent and address any other ethical considerations that may arise regarding research protocol. The participants must be provided with limits of confidentiality verbally and in writing prior to agreeing and engaging in the intervention program. The participants must know that the program they are engaging in is voluntary. Lastly, not all assessments are normed for all cultures as well as

mindfulness techniques may need to be modified to meet the needs of the individual without the primary focus being on the culture of athletics.

Summary

Due to limited research, this paper explored losing amongst collegiate athletes. The main objective was to develop an intervention for collegiate athletes to best support given needs. The model being used was the Logic Model with the integration of mindfulness based psychotherapy. The model evaluates one's intervention thoroughly by collecting data, analyzing and producing data. This program model focuses on what is working, why it is working, and how it is working. Mindfulness is not new to sports; however, this integrated program is new that it combines various techniques with the focus being after a competition loss. This integrated technique of mindfulness within the model may be effective, due to mindfulness being an evidence based training and the logic model having a vigorous evaluation process. Losing within the culture of sports could possibly change if the technique were appropriately applied and accepted by the population.

Theoretical foundations explored the difference between involuntary winning strategies and involuntary defeat strategies. The theory mainly focuses on how winning and losing may have an effect on one's mood. Cognitions and mood were found to be negatively affected after losing. It was also found that coach's negative reactions affected how the athlete negatively perceived losing. Another theory discussed was how the personality trait of neuroticism affects how one negatively copes and tends to have a lack of support. Those who react negatively after competition loss could possibly also have the personality trait of neuroticism as negative symptoms relate. Further research is needed to support such claims.

A few core assumptions are that if one ignores their feelings, then the negative feelings could resurface and later have negative consequences. Not addressing feelings after losing leads the athletes into the IDS and a maladaptive cycle of negative reactions. Furthermore, athletes can get lost in their negative cognitions, losing the present moment and possibly act out compulsively or impulsively. Also, mastering techniques of open monitoring and acceptance can best help those utilizing the mindfulness based intervention.

The model presented in this paper is the logic model and it provides a structure for one to focus on the needs of the community, influential factors, assumptions, strategies, and results. It focuses on the relationship between one's planned work and expected outcomes. The intervention of mindfulness training provided to a group of athletes and coaches get broken down in to core component of resources, activities, outputs, outcomes, and impact. The programs' activities are the developed intervention which include a battery of assessments and an integrated mindfulness training technique. Activities given are not only provided in hopes of helping the student athlete and coaches, but also possibly change the sports culture regarding losing. A case vignette was provided to best portray the intervention developed. There are a few strengths and limitations towards the development and utilization of the mindfulness training using the logic model and some ethical considerations to ensure the safety of all participants.

CHAPTER IV

Discussion

The sports culture emphasizes the outcome goals of winning and losing, as it impacts how one may react specifically to losing in competitions. An athlete's mood state and personality has been previously studied under the scope of optimal performance, the injured athlete or best rehabilitation practices. There were limited studies that focused on the impact of losing amongst collegiate student athletes and coping strategies or interventions to best help possible significant negative effects. This project explored negative effect of losing amongst the student athlete, specifically looking at areas of depression, anxiety, anger and aggression. The personality trait of neuroticism was also explored to acknowledge the influence of personality on one's perspective of losing. It was explored and understood that it wasn't dependent on a certain competition level for an athlete or coach to be emotionally invested and negatively affected, but it was more about the culture of sports and its emphasis on losing in general. The beliefs of the individual that was influenced by such culture is possibly why different athletes and coaches respond individualistically to losing. One of the research questions inquired previously was, what are the different aspects of losing a game as a collegiate athlete and how can sport psychologist help? There was not enough information gathered to address the collegiate athlete specifically, however, it was found that various aspects were affected after losing which were affect, cognitions, family, interpersonal relationships, intrapersonal aspects, physical biology of the brain, and coping skills. Sports psychologist can focus on given aspects and provide the intervention of an integrated mindfulness based psychotherapy to help. The sport psychologist could provide athletes with a battery of assessments to best help identify and understand the individual athletes and coach's needs, after experiencing a competition loss.

Another research question proposed within this paper was, what interventions are in place to reduce a negative experience? In general, when coping with negative experiences or stress in

sports interventions used are self-talk, relaxation strategies (i.e. deep belly breathing, breathing from the chest, progressive relaxation), autogenic training, meditation, biofeedback training, (Cox, 2007). Mindfulness based psychotherapy is used with the culture of sports as well as other cognitive techniques that address the athletes or coaches' issues. The purpose of this paper was to develop an intervention and model that focused on the negative emotions and aggressive behaviors that occur after losing. What would an intervention that addresses maladaptive experiences of competition loss among collegiate athletes look like? Provided assessments to obtain the significance and an integrated approach of various mindfulness techniques can directly positively address such maladaptive experienced by athletes.

Other ideas regarding the experience and change in losing, as well as recovering speed, and the impact of the intervention on the athletic staff would needs to be answered within future research. Without a quantitative/qualitative data to support findings, it would be difficult to answer which age group generates more or less maladaptive emotions and behaviors proceeding a competition loss. This project did not look at the direct comparisons between collegiate level athletes and youth athletic teams, however it was noticed that high school and other younger athletes, also experienced intrapersonal issues after experiencing competition loss. Professional athletes, provided in the case examples, also coped negatively to losing. Though this theoretical paper was able to address questions put forth, there are still many areas that are unknown within this area of study, collegiate athletes coping with competition loss. Therefore, a pilot study or generating action research can further answer questions in this area.

Clinical Implications

An integration of mindfulness based trainings in to one program provided to a team of athletes and coaches could have a positive impact on the negative effects of losing. Mindfulness offers a balance within intrapersonal aspects, cognitions, affect, and interpersonal relationship through awareness, remembering and attention (Davis & Hayes, 2011). The use of the Logic Model with the integration of mindfulness could best help the program be more effective. When setting specific expectations and addressing outcomes and impacts of the program, then this allows for adjustment to occur over the span of 10 years, to again provide the best integrative mindfulness trainings for athletic programs. After a competition loss, athlete's reactions could range from not effected at all to severe depressive episode, high anxiety, angry outburst or aggressive behaviors. Testosterone is also effected from losing. In such cases, sport needs to have mental health services available to address such issues. One's personality trait, neuroticism, may have an impact on how one perceives a competition loss. Assessments and mindfulness trainings could be provided to such athletes and coaches to not only change each individual on a diverse team, but possibly change the sports culture regarding losing.

Recommendations for Future Research

Future research studies could expand on the ideas put forth regarding focusing on athlete's ability to lose. Future studies could address different age groups focusing more on youth or professional level sports. Future studies could also focus on fans perceptions on collegiate athletes losing. This theoretical paper would like to provide a better understanding of athletes and coaches who has such experiences explained. Future research should apply the theory put forth and conduct a pilot study to best identify negative effects of an organization, given assessments and an integrated approach of mindfulness. A quantitative approach or qualitative approach of this paper could be helpful scientifically to prove theories put forth in this

paper. Other mindfulness techniques should be created and/added to help provide the most appropriate and best intervention applied to issues explored. Mindfulness techniques could then be compared. Future studies regarding personality traits and mindfulness could provide valuable information regarding any possible resistance to the given intervention program.

Conclusion

To conclude, further research needs to be done in this area of study to continue to provide the most appropriate intervention for athletes and coaches. More mental health providers are needed in the sports culture to best address negative effects and many other issues that are experienced amongst athletes and coaches. Not all research questions were able to be addressed within this paper, however future research could best help focus on this area within sports. The main concept is the power of perception amongst athletes after losing. Athletes perspective regarding the losing situation, provides individual feelings and reaction that may be harmful to their psychological self, physical self or, in some cases, involve harm to others. As the mental health professional facilitates the activities, they may too experience various benefits, due to practicing meditation and guiding others towards healthier selves.

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May 2, 2017

Tiffany Wilson
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tffny_wilson@yahoo.com

Dear Ms. Wilson,

Your application, "Perceived Loss Amongst Collegiate Athletes and Negative Effects" has no human participants or human participants' data and is fully certified by the Institutional Review Board as of May 2, 2017.

Please note that research must be conducted according to this application that was certified by the IRB. Your proposal should have been revised to be consistent with your application. Any changes you make to your study need to be reported to and certified by the IRB.

When you have completed your research you will also need to inform the IRB of this in writing and complete the required forms.

Good Luck with your research!

Please be careful not to lose this letter.

If you have questions please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Robert M. Anderson Jr." with a stylized flourish at the end.

Robert M. Anderson Jr., Ph.D., Co-Chair
Institutional Review Board

cc: Dr. Lianne Philhower

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Subject: Thanks for writing
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To: tffny_wlsn@yahoo.com;
Date: Thursday, November 23, 2017 3:49 AM

Dear Tiffany,

Thanks so much for writing. We would be delighted if you include these exercises in your dissertation. We only ask that you give the citation.

Wishing you the very best in your writing, and please stay in touch! Hope all goes well.

Warmest regards,

Susan (and Tom and Ron)

**Mindfulness Training while Using the Logic Model
Enhancing Usefulness After Competitions
It Is Not Just a Game**

Facilitators Manual

Developed by Tiffany Wilson-Landrum

Table of Contents

Introduction.....	57
Beliefs and Outcomes	
Statement.....	57
Common	
Resources.....	58
Evidence of Progress and	
Outcomes.....	58
Resources	
Needed.....	58
Training Schedule.....	
59	
Introductory Sample	
Script.....	60
Informed	
Consent.....	63
Interview	
Notes.....	67
Feedback/Comment Card.....	
68	
Debrief Sample	
Script.....	69

Activities.....	70
-----------------	----

Introduction

The Mindfulness Training while using the Logic Model enhancing usefulness after competitions program manual is designed to provide sports organizations with the knowledge and resources to approach the end of games in unison and in a calm state. These sessions are designed to provide student athletes with assessments before and after competition loss to identify and assess significance of emotion and various behavioral reactions. Participants will engage in a developed intervention, an integrated mindfulness training, to cope with and reduce various competition loss effects.

The objectives and assumptions of the Mindfulness Training while using the Logic Model program are:

- Athletes and coaching staff will complete two batteries of assessments within the sports season. (One before losing series/One after a loss within season).
- Athletes and coaching staff will complete a series of mindfulness training techniques as phases are guided by the facilitator, a mental health professional.
- Athletes and coaching staff will eventually learn to become their own masters and conduct phases of mindfulness techniques on their own, without direct guidance of the facilitator.
- Athletes and coaching staff will learn how to address emotions after competitions.
- Athletes and coaching staff will learn how to become more aware of their cognitions after a competition.
- Athletes and coaching staff will learn how to remain in the present moment after experiencing competitions loss.
- Athletes and coaching staff will learn how to become less reactive.
- Athletes and coaching staff will have the ability to provide feedback throughout the season to shape the intervention program to individualistic/team needs.

Beliefs of Outcomes Statement

It is the author's belief that understanding one's own abilities as a participant to concentrate, become aware of thoughts, and remain non-judgmental towards the self can influence the impact and benefits of using the mindfulness program. Participant will develop an understanding of

their experiences after a competition loss and how to appropriately cope with it. This facilitators guide is developed to provide support to the mental health professional guiding participants through an integrated mindfulness training. The author envisions that the benefits of this mindfulness program includes:

- A safe environment to identify and assess the significance of emotions and/or behaviors.
- An open space to remain present.
- A decrease in immediate stress or distress.
- A provided sense of support and encouragement at home gym or during road games.
- Help athletes tolerate strong emotions by calming the mind and decreasing anger and anxiety.
- Provide labels, balance and adjust the athlete's behaviors from being reactive.
- Replacing negative feelings and interactions between the athletes and coaching staff.
- Providing a balance, after an upsetting loss and the ability to produce some different perspectives.

These are a few common resources needed before and throughout the Mindfulness Training Program

1. The environment must remain safe and preferably a locker room that allows for relaxations and confidentiality.
2. Athletic directors' acknowledgment of the impact of losing amongst student athletes and the need of mental health services in sports organizations.
3. An organization of athletes, individual athletes or coaching staff who experience competition loss.
4. A battery of assessments to identify and gauge the significance of the negative effects amongst the athletes.
5. Facilitator must be a mental health professional dedicated to mindfulness training and the desire to alter the sports culture perspective in the aspect of losing.
6. Facilitator's should provide a consistent feedback system to gauge outcomes and benefits to adjust mindfulness techniques if needed.

Resources Needed:

Mental Health Facilitator
 Locker Room/Classroom Setting
 Flash Cards/Business Cards
 Computer/printer
 Sign-in Sheet
 Written Consent Form
 Facilitators Manual

Evidence of Progress and Outcomes

- Participants will complete a second assessment to compare to baseline assessment scores. Facilitator notes any changes.

- Participants will provide feedback regarding thoughts and feelings after a competition loss and each attempted completion of the mindfulness program.
- Participants will have an increase in usage of mindfulness training and assessments used in sports.
- A decrease in negative behaviors are observed.
- Increase in communication, research and comfortability in discussions regarding experiences with losing.
- Shorter/faster recovery process after loss and an increase in concentration and focus on next game.

Training Schedule

Day I of First Assessment: **Total Time: 1.25 Hour**

Introduction 30 min
 Informed Consent

Battery of Assessments 30-45 min

After Competition Loss, Repeated Mindfulness Techniques: **Total Time: 50 min**

Provide Activity Phases 30-40 min

 Flash Cards/Business Cards

 Touch Points

 Awareness of Sensations

 Labeling Emotions

 Offering Loving and Kindness to Oneself

 Working with Difficult Persons

 Four Elements

 Accepting the Challenge

Feedback/Comment Cards 5-10 min

Second Assessment (Before End of Season):

Total Time: 55 min

Battery of Assessments

30-45 min

Debrief Statement:

Total Time: 15 min

Introductory Sample Script

Good Morning (team name). I would like to take the time out to thank you for joining me today and joining this upcoming journey we will take together in support of this program. I will give you a brief overview of the Mindfulness Techniques while using the Logic Model Enhancement of Usefulness After Competitions program.

What is this Program?

The objectives and assumptions of the Mindfulness Training while using the Logic Model program are:

- Athletes and coaching staff will complete two batteries of assessments within the sports season. (One before losing series/One after a loss within season).
- Athletes and coaching staff will complete a series of mindfulness training techniques as phases are guided by the facilitator, a mental health professional.
- Athletes and coaching staff will eventually learn to become their own masters and conduct phases of mindfulness techniques on their own, without direct guidance of the facilitator.
- Athletes and coaching staff will learn how to address emotions after competitions.
- Athletes and coaching staff will learn how to become more aware of their cognitions after a competition.
- Athletes and coaching staff will learn how to remain in the present moment after experiencing competitions loss.
- Athletes and coaching staff will learn how to become less reactive.
- Athletes and coaching staff will have the ability to provide feedback throughout the season to shape the intervention program to individualistic/team needs.

Who Should Participate in This Program?

A group of athletes, individual student athletes or coaching staff who experience a competition loss at the college level.

Who Should Facilitate This Program?

This manual was created so that any other mental health professional can pick it up and use the step by step materials. Mental health professionals may be the most appropriate as it engages mental health providers in sport organizations and allows for the appropriate facilitator who is trained to provided assessment/questionnaires' and mindfulness techniques. Mental health professionals range from any student of behavioral health to a psychologist who is trained in given assessments and mindfulness techniques.

Why Do This Program?

Basic Assumptions:

- Athletes driving feelings underground do not remove feelings, but eventually resurface.
- Shame and guilt, hopelessness and anger, depression, low self-esteem, low self-confidence and a negative self-concept may be being ignored or buried amongst athletes after a game.
- Getting stuck in an involuntary defeat strategy and maladaptive cycle means negative feelings were not addressed by athlete.
- After a loss, an athlete gets lost in negative thought content and loses what the mind is doing in current moment.
- There may be a reduction in positive coping strategies and an increase in negative thoughts after a competition loss.
- Before retreating from pain due to loss, athlete acts compulsively/impulsively without considering thoughts or behaviors. (aggressive behavior, screaming, swearing immediately after a game)
- Mindfulness provides for a non-judgmental, accepting attitude, and increase presence.
- (moment to moment consciousness can increase after a game)

It is the author's belief that understanding one's own abilities as a participant to concentrate, become aware of thoughts, and remain non-judgmental towards the self can influence the impact and benefits of using the mindfulness program. Participant will develop an understanding of their experiences after a competition loss and how to appropriately cope with it. This facilitators guide is developed to provide support to the mental health professional guiding participants through an integrated mindfulness training. The author envisions that the benefits of this mindfulness program includes:

- A safe environment to identify and assess the significance of emotions and/or behaviors.
 - An open space to remain present.
 - A decrease in immediate stress or distress.
 - A provided sense of support and encouragement at home gym or during road games.
 - Helps athletes tolerate strong emotions by calming the mind and decreasing anger and anxiety.
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- Provide labels, balance and adjust the athlete's behaviors from being reactive.
 - Replacing negative feelings and interactions between the athletes and coaching staff.

- Providing a balance, after an upsetting loss and the ability to produce some different perspectives.

Where Should This Program Be Held?

The activities should be conducted in a locker room or room the athletes find the most comfortable. If conducting assessments activities then activities should be conducted in a classroom setting with multiple desk.

When Should This Program be Facilitated?

When the mental health professional originally meets with the team, then interviews of issues observed would be conducted. Then introductions of the program and signed informed consents are given immediately after meeting. Then immediately after a competition loss, the team would be guided through a series of mindfulness techniques. The athletes and coaching staff will provide feedback, after given all phases of the mindfulness techniques. Before the season ends, the facilitator will provide another battery of assessments to gauge any adjustments in scores. Then the facilitator provides a debrief statement to conclude the program.

Perceived Loss Amongst Collegiate Athletes

INITIAL CONSENT FOR PARTICIPATION IN MINDFULNESS TRAINING PROGRAM

1. *Who are the facilitators?* Hi, my name is (insert name here) and I am the facilitator of the Mindfulness Training while Using the Logic Model Enhancing Usefulness After Competitions program. I am providing this program to explore its significance and effectiveness in sports. This program may be duplicated and findings may lead to further research in this area of sports. Outcomes and findings from this program could be used for further research purposes.
2. *What is the aim of the program?* The aim of this program is to explore the experience of losing in competitive sports for college athletes, the experiences they have had at different times in their lives, and their thoughts about these experiences related to competition loss. The ultimate aim of this program is not only to help me understand more about your experiences, and what they have meant to you, but to develop an effective interventions program to help athletes cope differently after a competition loss.
3. *How was I chosen?* I will be providing assessments and the guided integrated mindfulness techniques to college athletes and coaching staff as a group or individually, depending on needs. I have chosen you because I think you have some valuable insights to offer. *You are currently in college, play sports, engage in the sports culture regularly and have experienced losing in your sport.*
4. *What will be involved in participating?* I would like you to complete two battery assessments (4 questionnaires) (one after introductions/the other later in the season preferably after experiencing a competition loss). Ordinarily, the first battery of assessments will take about an hour or less, depending on the responder, you as the participant. During the assessments phase, you will complete the assessments to the best of your ability alone. With your permission, I would like to score your assessments and keep a record copy of scores to use as a baseline and compare scores to later assessments given. ~~Second battery of assessments will be given after experiencing a competition loss~~ randomly within the season. Again, you are expected to complete assessments alone and return documents to me, your facilitator, to review findings. During the Mindfulness Training phase of the program, you will allow me, as the facilitator, to guide you through

a series of mindfulness techniques while you remain in a calm and comfortable state. This will take approximately 40 minutes. Afterwards, I would like you to provide me with feedback after the completion of the entire mindfulness phase. This will take approximately 5-10 minutes for you to ask questions, generate remarks and complete the feedback/comment card. After every loss, we will repeatedly complete the Mindfulness Technique phase of the program. This will take approximately 30-40 minutes after every game. I would also like to take some notes to help me organize my thinking about what you are sharing as well as to modify my program to meet your needs as an individual or team. I would also be tracking outcomes, short termed and long termed, as well as the programs overall impact. During our last meeting, I would like to review your findings with you and my understanding of what you have shared as a group with me, to again modify and provide the best intervention for coping with competitions loss.

5. *Who will know what I say?* In addition to me, other researchers will have limited access to your overall completed findings. As previously mentioned, your findings may lead to further research in the future. Identifier information will be redacted from all findings before being shared.
6. *What potential risks are associated with participation?* Although I do not foresee any major risks to you, talking about your experiences may bring up some unexpected memories and insights that can be upsetting. The remembrance and experience of intense feelings associated with critical experiences may be painful and unresolved. Should this happen, I would like to stop the program, and take time off the record to better understand what is coming up for you. Then, I would like to support you in deciding what may be the most helpful way to address these concerns. This might include taking a brief break and then completing the program, ending the program for the day and returning to complete it later, or completely withdrawing from the program. Your welfare, above all else, is important to me. Whatever we discuss off the record, will not be included as part of the data stream in the findings. I will allow you to determine what information should be included in the overall findings.

During the program, I will attempt to protect not only your confidentiality but your anonymity as well. Since this is a small community, though, there is always the possible risk that despite my efforts, someone who reads the study may be able to figure out who you are. To minimize this risk, your name will not appear on any assessments, notes or in my provisional write-up. Scored assessments will be stored on (*a password protected data storage device, password protected computer, etc.*). Hard copies of assessments, when not in use, will be stored in a locked safe or filing cabinet, which only I have the (key/combination). Other researchers will only have access to these materials when performing research to advance findings. In my notes and possible discussions with them, I will not refer to you by name. Instead, I will use a code name of your choosing. Please indicate the name you would like me to use for you in documenting my program:

Your confidentiality will be protected at all times, as the law requires, with the following exception: I am required by law to inform an appropriate other person if there is reasonable suspicion that you are a risk to self or other—a child, elder, or dependent

adult has been abused by you. My intent would be to ensure your safety and the safety of others by networking you to resources that could support you through current challenges. In such an instance, we might also decide to temporarily stop the program until you have a chance to access these resources.

7. *What are potential benefits of participation?* Sometimes people find participating in a program like this to be beneficial insofar as it gives them a chance to talk about things that matter to them. I hope the same will be true for you as well. Through this program, college athletes may gain a better understanding of what they are going through and not feel alone in their experiences of losing. They may be supported in seeking help if knowing that they are not alone. They may find more beneficial coping strategies during a tough situation.
8. *What are my rights as a respondent?* You may ask any questions regarding the program, and I will attempt to answer them fully. You may withdraw from the program at any time without having to provide a reason and without fear of negative consequences with me or the members of my team. Your participation is voluntary. If at any time, you would like to speak off the record, you may express this and only when you feel ready will I continue to take notes. Anything you discuss during this time will not be entered into the data stream unless you discuss them on the record at a later date. You may waive any question you do not wish to answer. You also may defer and answer a question at a later date. You have the right to review my work that pertains only to you at any point in the process.
9. *What will be published or presented anywhere?* As mentioned above, I would like to review the write-up of my findings with you during our last meeting as a group. At that time, I will ask you for permission to use any quotes from our conversations or feedback given to illustrate your experiences more clearly to others. You have the right to review these materials and decide which quotes you will allow me to include in my final write-up. You may also reword, add to, or decline my use of others. I will not publish or present your story in a professional forum.
10. *If I want more information, who can I contact about the program?* If at any point in the program, you have questions about my program, you may contact me at (insert office/mobile number here) or at (insert email here).

By written notification to _____, below, I indicate that I am
(Facilitator)

18 years or older. I also indicate that the information presented in this document has been reviewed and explained to me to my satisfaction, but that this procedure does not preclude me from seeking further clarification of items in the future. I understand the nature and intent of this Program. I also understand my rights and what is being asked of me as a participant. I understand all of the above and provisionally agree to the conditions specified. I understand that I will be given an opportunity to complete this informed consent procedure at the completion of

my participation--after I have had a chance to review the materials I have provided for this program. This will allow me to make any corrections, changes, or additions to the program portrayal of my experiences. I understand that I still maintain the right to revoke this consent at any time during the program without cause.

Participant, please print name

Participant, please sign name

Date

Interviewer, please print name

Interviewer, please sign name

Date

Interview Notes

(Take notes from interviewing athletic director/coaching staff/athletes regarding issues)
(Establish who is the client in the meeting process)

Your Facilitator:

Date of Training:

Feedback/Comment Card

Please provide feedback on what the trainers/program did well and should continue to do?

Please provide feedback about what are some things the trainers/program could improve on or change?

Additional Comments:

Debrief Sample Script

Thank you again team for engaging into the Mindfulness Training Program. This ends our training sessions together. Before we completely end and I present my findings, please can you fill out one last feedback/comment card reflecting on the overall experience with the program and with me as your facilitator, so I can make it more effective and modify the program, if necessary. Please add what you felt was the most challenging. Would you suggest this program to other athletic teams, why or why not? Is this program better for individual athletes compared to providing the activities to a group setting? (provide 5-10 to feel out last feedback form). Here are a few things that I observed and had communicated with your athletic director, coaching staff and you as athletes prior to engaging into the Mindfulness Program (offer information if approved and cleared by athletic director, coaches or athletes). After the season and your engagement in the program, here are things I have observed and based on your feedback regularly, these were some outcomes (offer findings to participants only once cleared by necessary staff). All assessments taken will now be destroyed, however, scores on each test have been documented on a master list with no identifiers, not even the name of your team will be identifiable. Again, results could lead to future research and findings may be important for those who would like to continue studying this aspect of losing amongst collegiate athletes. Do you have any further questions regarding the program? Have I covered all of your concerns?

Thank you for all of your time and good luck on your next season.

Activities

A. Providing Battery of Assessments (First Time):

Only provide after introductions and after the athletes/coaching staff have discussed and signed the informed consent form. Only provide after participants have had the opportunity to ask questions. When scoring, identify and assess the significance of indicated issues, if any. In a classroom setting stack each test in the corner of each individuals desk space. Allow for the participants to complete each test given individually. Provide a number to each athlete and match to their code name of choice. Keep master list. Provide the athletes with a minimum of these tests or tests that assess the same thing:

The Profile of Mood States (POMS), Competitive State Anxiety Inventory-2 (CSAI-2R), Buss-Perry Aggression Questionnaire (B&P), Five Factor Inventory (NEO-FFI)

B. Mindfulness Techniques

During this phase, after a competition loss, provide the athletes with these series of techniques: Flash Cards/Business Cards, Touch Points, Awareness of Sensations, Labeling Emotions, Offering Loving and Kindness to Oneself, Working with Difficult Persons, Four Elements, Accepting the Challenge Technique.

Bold letters are just examples and can be changed to fit the group.

1. Flash Cards Technique:

Complete this portion of the phase in a classroom setting or in the locker room, in the beginning of the season. It does not have to wait until after a competition loss. As the facilitator write down each athlete's individual statements. Instruct the athletes to say or write down a positive slogan or positive affirmations, using I statements when necessary. **An example, Wins come off of the lessons learned from losses. A loss is temporary in a pursuit of a win.**

On the board in the locker room or on the coach's board write a slogan/quote that provides support and encouragement to the team, using we statements when necessary. ***We will fight another battle together until the end*** (Pollak et. al, 2014). Create a business card for each athlete and coach to use throughout the season. Instruct the athletes to refer to their business card at a minimum after every game that they lose and anytime they need extra support and encouragement throughout their season.

2. Integrated Mindfulness Meditation:

Complete the following techniques in order in the locker room setting. Instruct the athletes to pick a comfortable spot in the locker room, in a chair, on a bench, or on the floor as we will be bringing ourselves to a calm state. Instruct the athletes to relax as they will now be guided through various mindfulness techniques. Instruct the athlete to take at least three deep breathes slowly. If you can, as the facilitator, participate as much as possible to gauge appropriate timing of when to move on to the next phase and provide athletes with a live example to follow. Athletes can mimic behavior. As the instructor, if possible, participate with your eyes open to view the participants and notice when to move to the next phase.

- Touch Points (Pollak et al., 2014). Give the participants the opportunity to notice how their body is touching and what the body is touching. Start at the top of one's head. Notice how one's **hair touches their face or the back of their neck**. Bring attention to how one's **eye lids are touching, how one's teeth are touching**. Notice how one's **arms are touching the floor or one's hands are touching their lap**. If sitting on the floor notice how the **back of the legs is touching the floor**, and the **back of the heels on the floor**. If **legs are bent notice how the bottom of the foot is touching the shoe which is touching the floor or the foot is touching one's sock and then touching the floor**. If **taped for injuries, notice how the tape is touching the skin**. Participants can add a few physical soothing gestures, by **rubbing fingers together, wiggling toes, or rubbing ears**. Bring the attention to the touching of the body. Do this in a sequence at least twice, from head to toes, focusing on areas that you choose individually. Breath in deep twice before moving on to the next phase...
- Awareness of Sensation (Pollak et al., 2014). Instruct the athlete to switch their attention to the sound around them. Letting it go through one ear and out the other. You can use imagery to **imagine sound waves bounce off of the ear or a musical strip flow through one ear**, noticing the sound in one ear and out the other, letting it pass through. Focus on each breath. Answer to yourself, where you feel your breath. **Is it in your chest? In your stomach?** Wait until you feel a physical sensation and then notice it. How do you feel and where do you feel it? **Is it throbbing in your ankles? Is it coldness in your finger-tips? Is it pain in your shoulders?** Please be specific when label where you feel a sensation and try to identify how it feels. Then release each sensation. Let them go until they fade away. Take two deep breathes before moving on to the next phase (take a minimum of approximately 2 minutes)...
- Labeling Emotions (Pollak et al., 2014). Instruct the athletes to remove their attention from sensations felt in the body and focus on identifying emotions. Try not to pass judgments about them. Notice the tone and volume of your inner voice that suggest either a pleasant or unpleasant attitude. Do not get engaged or involved in the emotions. Simply greet them with kindness and warmth. Then let the emotion go and fall to the floor. Label each emotion, negative or positive, notice your reaction and then let them go. Do not think of why you may have such emotions. Just simply label them. Take two deep breaths when you have labeled all of your emotions to get ready to move into the next phase (take minimum approximately 2 minutes)...

- Offering Loving and Kindness to Oneself (Pollak et al. 2014). Shift focus back to the body and notice if you have any tension or discomfort within your body. Bring gentleness and softness to those area that are tense, by releasing it. As you release the tension recite kind words to yourself. **For example, you can say, *this has taught me something. I will be prepared for the next one. My flaws have humbled me.*** Through the use imagery, **imagine the words floating in front of you where you can reach out and hold in the palms of your hands.** Choose phrases that you can hold on to that offers love and kindness. Take two deep breaths when you have grasped your phrase. It is important to hold the attitude of love and kindness as we move into the next phase (take a minimum of approximately 2 minutes)...
- Working with Difficult Persons (Pollak et. al., 2014). Shift your focus to someone you find difficult and it does not have to be the most difficult person. Start by offering love and kindness to them. For example, **may they find peace in their heart.** Then when ready add yourself to the phrases, **may we find peace, may we remain humbled.** Then move to your most challenging person in this locker room, whether it is a teammate or a coaching staff member. Again, offer love and kindness to them using “we” phrases. **May we work together in harmony.** Focus on the most challenging person for at least 30 seconds and every time we practice this exercise, increase the amount of time spent on offering love and kindness to the most challenging teammate/coaching staff. Go back to two deep breaths when you have completed this task. Offer love and kindness to the self while going into the next phase....
- Four Elements (Pollak et al., 2014). Now instruct the athletes to take two deep breaths while clearing the mind. Instruct them to choose one of the four elements, earth, water, fire, and air. This time, rely on all imagery. If imagining earth then imagine a massive earth structure, **the mountains with snow, the Grand Canyon, Mount Rushmore.** Allow oneself to consume the enormity of it all while remaining grounded, **within the earth looking up or sitting on top viewing down.** If imagining water, then again notice the flow of the massive **amazon river or the strength and power behind the Niagara Falls.** Wash away all negativity or tension felt within the body, leaving it purified and relaxed, and recharged. If imagining fire, then imagine a safe fire, **one that is cracking in a fireplace,** that gives off a little heat and liveliness. And finally, if one is imagining the sky, **try to lose oneself in space,** thinking on all the opportunity from openness and lightness it brings to just float. While imagining any of the four elements, breath at least 5 deep breaths. (take a minimum of 3 minutes). Now be prepared to move on to the last phase...
- Accepting the Challenge (Pollak et al, 2014). Instruct the participants to now focus on the competition loss they just experienced together. Bring attention to any thought, emotions, or fears that are connected to the game. Instruct them to focus on where they feel this within your body. Now pick a mentor to sit with in your mind. Imagine someone who is considerate, wise, and gentle towards you, **a mentor.** This can be **a coach, another athlete, a family member.** Discuss the game with them. **Let them know** your thoughts and fears and emotions. Most importantly, tell them what you learned, and what new skills you have developed through experiencing this loss. Sit with the lessons learned and thoughts regarding new skills developed. Embrace and choose to see it through this new perspective as you sit with it for a while, breathing. Each loss

experienced can allow you as the participant the opportunity to grow. Consider this idea and breath before opening your eyes and completing the mindfulness technique phase (take a minimum of approximately 5 minutes).

Provide feedback/comment card after each phase the facilitator guides the group through phase. **(Repeat the mindfulness phases after every loss for the remainder of the season)**

Pollak, S. M, Pedulla, T., Siegel, R. D. (2014). *Sitting together: Essential Skills for Mindfulness-Based Psychotherapy*. New York, NY: The Guilford Press.

C. Providing Battery of Assessments, (Second Time):

Provide after at least a minimum of eight losses or weeks, whichever comes first. Only provide after participants have had the opportunity to complete the mindfulness phase. Provide code number on new assessments that match first code numbers and names from first assessment attempts. When scoring, identify and assess the significance of indicated issues, but this time comparing scores from previous. Take note of any difference found. In a classroom setting stack each test in the corner of each individuals desk space. Allow for the participants to complete each test given individually. Provide the athletes with a minimum of these tests or assessments that measure the same thing:

The Profile of Mood States (POMS), Competitive State Anxiety Inventory-2 (CSAI-2R), Buss-Perry Aggression Questionnaire (B&P), Five Factor Inventory (NEO-FFI)
