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Daniel Ryan
University of Nevada, Las Vegas

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Enhancing Off-Season Motivation in Collegiate Athletes

by

Daniel Ryan

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Introduction

The focus placed on achieving success in collegiate athletics has created a culture that demands a high level of off-season commitment by athletes in order to achieve optimal sport performance at the collegiate level. The motivation to commit to the off-season training program differs greatly among athletes, ranging from pure intrinsic motivation to various forms of extrinsic motivation or amotivation. Thus it is the responsibility of the coach to identify and utilize the ideal motivational strategies for producing optimal levels of motivation, commitment, and effort in all of their athletes during the off-season. Off-season training is not an inherently enjoyable task for many collegiate athletes, yet it is important to their overall sport success. Through the development of a deeper understanding of what motivates athletes, coaches will be able to identify and utilize the characteristics of an ideal coaching style conducive to the facilitation of self-determined motivation in athletes at the collegiate level.

Purpose

The purpose of this paper is to identify the optimal off-season motivational strategies to be utilized by collegiate coaches to maximize the motivation, sport performance, and sport satisfaction of collegiate athletes.

Objectives

By identifying the determinants of athlete motivation, this paper will serve as a resource for coaches as they seek to raise the overall motivation and commitment of their athletes during the off-season.

Justification

Developing the ideal off-season motivational strategy for collegiate athletes is important on a number of levels. Due to the heightened level of competition in college sports, coaches

must ensure that the structuring of their off-season training programs is both efficient and effective in motivating athletes to fully commit to improving over the course of the off-season. Athletes who lack motivation or who are motivated for the wrong reasons will not improve over the course of the off-season to the extent that is necessary to be competitive in collegiate athletics. It is the duty of the coach to properly motivate athletes and illustrate the values of the sport activity, thus it is important to possess a proper and thorough understanding of ideal motivational strategies. However, sport performance is not the only key factor. By developing a deeper understanding of the determinants of self-determined motivation of athletes, coaches will be able to not only elevate the level of self-determined motivation, but they will also have the knowledge necessary for increasing the resultant satisfaction and well-being of athletes as well.

Constraints

While the theories reviewed in this paper originated in the disciplines of psychology and education, the review of the empirical research is based on studies conducted primarily in the field of sport psychology. Therefore, this review will provide a motivational framework for collegiate coaches based on the current studies of motivation in the field of sport psychology. The analysis of self-determination of collegiate athletes is based on the current available research and is limited in scope by existing gaps in the literature. Finally, the implications and conclusions drawn by the study are based on the analysis of the author and are not tested in case study.

Literature Review

Introduction

The development of an effective motivational framework for college coaches requires an in-depth understanding of the theories and constructs that define self-determined motivation. The following literature review will focus on the three major theories of self-determined motivation in the field of psychology and their relevant application to sport.

Serving as the primary theoretical framework of this paper, self-determination theory (SDT) posits that there exist three fundamental psychological needs that affect the self-determined motivation of an individual (Deci & Ryan, 1985). The psychological needs of autonomy, competence, and relatedness are essential in the construction of self-determined motivation and thus will be reviewed and analyzed to determine their role in the off-season motivation of collegiate athletes.

Secondly, this paper will utilize the theory of self-efficacy to address the fundamental need of competence and the role it plays in off-season motivation. For Bandura (1977), self-efficacy refers to an individual's belief in their capabilities to execute the necessary behavioral actions to produce the desired results. This directly ties to feelings of competence in athletes and will provide the proper theoretical framework for understanding the role of competence and self-efficacy in motivation. Finally, achievement goal theory will be reviewed and addressed, as the manner in which an individual defines success greatly affects the subsequent motivation toward participating and committing to the task at hand (Harwood, Spray, & Keegan, 2008).

Self-Determination Theory

Self-determination theory (SDT) was born from an interest in understanding and explaining the social and contextual conditions that facilitate and/or hinder self-determination

and psychological development in individuals (Ryan & Deci, 2000). SDT analyzes human

motivation and personality characteristics, while highlighting the important role of evolving

inner resources for the development of behavioral self-regulation in individuals (Ryan, Kuhl, &

Deci, 1997). In SDT, the emphasis is placed upon distinguishing behaviors according to whether

those behaviors are intrinsically motivated, that is driven by motives of interest, enjoyment, and

challenge, or whether those behaviors are extrinsically motivated by outside influences such as

rewards, material gains, or external pressure (Frederick & Morrison, 1999).

SDT examines the inherent growth tendencies as well as the psychological needs innate

to all individuals that ultimately function as the foundation for the development and

enhancement of self-motivation and personality integration (Weiss & Amorose, 2008). SDT is

defined by the idea that all individuals possess three categories of energizing states that when

satisfied are beneficial to the health and well-being of that individual (Ryan & Deci, 2000).

These energizing states, known as the three fundamental psychological needs of humans, have

been identified through the examination of the factors that enhance or undermine intrinsic

motivation, self-regulation, and well-being. According to Ryan and Deci, these needs are both

universal and innate requirements present in all individuals. Ryan and Deci (2000) liken these

three fundamental needs to essential nutrients stating that an individual cannot survive without

them any more so than the human body can survive without the essential nutrients provided by

food.

Through the empirical study of self-determination, researchers have identified autonomy

(deCharms, 1968; Deci, 1975), competence (Harter, 1978; White, 1963), and relatedness

(Baumeister & Leary, 1995; Reis, 1994) as the three fundamental psychological needs

responsible for the development or obstruction of intrinsic motivation, behavioral self-regulation,

and personal well-being (Ryan & Deci, 2000). SDT utilizes these three psychological needs, which drive self-motivated behavior, and applies them to the traditional notions of intrinsic and extrinsic motivation in order to provide greater depth and understanding of self-determined motivation (Spray, Wang, Biddle, & Chatzisarantis, 2006). Although Ryan and Deci (2000) state that the three fundamental needs are innate and universal, the idea of universality does not indicate that the manner in which the three fundamental needs are satisfied or impeded will be the same amongst all people, across all places and times (Weiss & Amorose, 2008). Instead, the universality of the three fundamental needs represents the idea that everyone regardless of all demographics requires some sense of autonomy, competence, and relatedness to create positive well-being (Ryan & Deci, 2002).

Research shows that individuals will seek to participate in activities that effectively fulfill these three essential needs, engaging in and demonstrating a higher level of self-determined motivation for participation in those need fulfilling activities (Amorose & Anderson-Butcher, 2007). It is these three basic needs, autonomy, competence, and relatedness, that must be effectively satisfied in order for an individual to experience an enhanced sense of self-determined motivation and well-being in relation to a particular behavioral activity (Ryan & Frederick, 1997; Waterman, 1993). If an individual perceives that an activity satisfies these three basic needs, the behavior, which may not have originally been intrinsically motivated, can with time become internalized and become more autonomously regulated (Spray et al., 2006). However, when a particular activity does not satisfy the needs of autonomy, competence, and relatedness, individuals are more likely to experience pathology, ill being, and a reduction of self-determined motivation toward the activity (Ryan & Deci, 2000). In essence, only the situations that promote these three fundamental needs will result in the optimal functioning of the

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individual. Any situation that does not satisfy an individual's fundamental needs of autonomy, competence, and relatedness, will lead to the occurrence of a nonoptimal outcome and greatly inhibit the overall satisfaction that the individual experiences from the event (Weiss & Amorose, 2008).

Autonomy

Autonomy is the first and most frequently studied of the three fundamental needs of SDT. Ryan and Deci (2002) refer to autonomy as an individual's perception that he or she is the origin or source of his or her own behavior; and as Weiss and Amorose (2008) describe it, autonomy is the need of an individual to perceive that thoughts and behaviors are freely chosen. Ultimately, in order for an individual to perceive that a particular behavior is satisfying the fundamental need of autonomy, that individual must feel that the decisions and actions they are acting upon are based on their own interest or integrated values instead of being coerced into action by an external controlling force (Ryan & Deci, 2002). It is the individual who perceives the fulfillment of their fundamental need of autonomy who will exhibit the strongest forms of self-determined motivation toward a given activity or task (Ryan & Deci, 2002). This idea is backed by a number of empirical studies that provide comparisons between individuals who are authentically and autonomously motivated and those who are being externally controlled. These studies generally confirm that autonomous motivation, as opposed to external motivation, results in enhanced performance, task or activity persistence, self-confidence, and overall interest in the task at hand (Deci & Ryan, 1991; Sheldon, Ryan, Rawsthorne, & Illardi, 1997).

Although autonomy is specified within SDT as the degree to which individuals perceive they have a choice in their behavior, SDT does not maintain that individuals must be entirely independent from all external influence to perceive a sense of autonomy (Hollembeak &

Amorose, 2005). Autonomy is not antagonized by dependence; in fact an individual can act upon values and behaviors of external sources, while simultaneously maintaining the perception of autonomy (Ryan & Deci, 2002). Ryan and Deci state that provided an individual congruently endorses the values and influential behaviors promoted by external sources, autonomous action can still be the end result. Thus, the individual who values the influence of an external source can demonstrate a congruence of simultaneous autonomous action and external regulation (Ryan & Deci). If however, one relies on external influences by simply complying or conforming to external demands, the fundamental need of autonomy will not be satisfied and the result will be a negative impact upon self-determined motivation (Ryan & Deci). Satisfaction of the fundamental need of autonomy is essential to the development and cultivation of self-determined motivation in any individual. Without this perception of autonomy fulfillment, an individual will be much less inclined to demonstrate intrinsic or self-determined motivation toward the task at hand.

Competence

Competence is the need of an individual to perceive that their behavior and interactions within the social environment are effective (Weiss & Amorose, 2008). The second of the three fundamental needs of SDT, competence is oftentimes defined and evaluated by the perception that an individual possesses adequate ability in the task at hand (Amorose & Anderson-Butcher, 2007). This does not indicate that in order to possess the perception of confidence within a given task that an individual must demonstrate all necessary skills or capabilities associated with that task, however, one must have a felt sense of confidence and effectiveness in their actions to fulfill this fundamental need. That is, an individual must feel that they are capable of effectively performing or completing a task, not that they are capable of executing the task perfectly.

In SDT, competence is viewed as a unitary human need that, when satisfied, provides for the promotion of self-determined motivation in individuals (Ntoumanis, 2001). Ryan and Deci (2000) argue social-contextual events like communication, feedback from others, or external rewards that are conducive toward perceptions of competence will enhance the intrinsic motivation an individual has for a particular behavior or action. Mageau and Vallerand (2003) demonstrated the importance of feedback on competence satisfaction when they illustrated the beneficial effect that positive feedback regarding an individual's behavior has upon perception of confidence and the positive impact it has on intrinsic motivation. Individuals who receive positive feedback from external sources reported a higher perception of confidence and were more inclined to approach the task for reasons prompted by self-determined motivation or even purely intrinsic motivation (Mageau & Vallerand, 2003). This finding supports Deci and Ryan's (1985) original theoretical stance regarding competence, showing that the more competent an individual perceives himself or herself to be at a particular activity, the more intrinsically motivated they will feel to participate in and excel at the given activity.

The role of perceived competence has also been shown to have a mediating effect between performance feedback and intrinsic motivation. Vallerand and Reid (1984) utilized a balancing task and various feedback conditions to examine the role that perceived competence plays in mediating the impact of performance feedback on intrinsic motivation. Results showed that positive performance feedback did in fact increase the intrinsic motivation of participants toward the balancing task, while also showing that the perceived competence of participants was the mediating factor in the relationship (Vallerand & Reid, 1984). Ultimately, the fulfillment of the fundamental need of competence requires one to fully perceive that the abilities, which are possessed, are adequate and effective in the achievement of a given task (Amorose & Anderson-

Butcher, 2007). As is the case with perceptions of autonomy, the perception of competence is fundamental in the promotion of optimal psychological functioning and the positive well-being of an individual (Weiss & Amorose, 2008).

Relatedness

In addition to the fundamental needs of autonomy and competence, SDT states that satisfaction of the third fundamental need, relatedness, facilitates the process of internalization of behavior and values (Niemiec & Ryan, 2009). This need is represented by the need for an individual to perceive a connection to those around them, as well as experience a sense of belongingness (Weiss & Amorose, 2008).   Baumeister and Leary (1995) describe the fundamental need of relatedness as being innately prepared; it is an individual's universal need to form and maintain at least a minimal quantity of interpersonal relationships. It is a fundamental characteristic of an individual to be motivated by a need to belong. A powerful longing to establish and sustain meaningful interpersonal relationship is innate in human beings and results in every individual's quest to encounter frequent and affectively positive interactions (Baumeister & Leary, 1995).

SDT states that an individual's sense of relatedness is not associated with any particular outcome or status, but rather it is defined by a psychological sense of secure communion or unity amongst other individuals (Ryan & Deci, 2002). This unity is formed through the fulfillment of two specific characteristics. The first characteristic that must be fulfilled is the need for frequent and enjoyable interactions with others, and secondly, these interactions must occur within an environment that is both stable and centered around the concern for each individual's basic welfare (Baumeister & Leary, 1995).

When these criteria are met, the individual experiences a greater effect on overall self-

determined motivation. According to Niemiec and Ryan (2009), people tend to internalize and more readily accept the actions and values of those with whom they share the greatest connection within contexts that produce a sense of belonging. Thus, just as an individual can feel autonomous while simultaneously being externally influenced, the perceived fulfillment of relatedness for an individual is paramount to the internalization and acceptance of values and actions that may not be necessarily intrinsically motivated.

While the fundamental need of relatedness has been the least studied of the three fundament needs, SDT hypothesizes that intrinsic motivation is more likely to flourish in contexts that are characterized by a sense of relatedness amongst individuals (Ryan & Deci, 2002). Two separate studies serve as a testament to that hypothesis as both Anderson, Manoogian, and Reznick (1976) and Ryan and Grolnick (1986) found significantly lower intrinsic motivation in students who perceived their teacher to be cold and uncaring or even as ignoring the student and his or her behavior. This serves as evidence supporting the foundational belief of SDT that without a fulfilled sense of relatedness, individuals will present lower levels of intrinsic motivation and satisfaction toward a particular behavior or activity.

Hierarchical Model of Intrinsic and Extrinsic Motivation

Based upon SDT, Vallerand (1997) created the hierarchical model of intrinsic and extrinsic motivation (HMIEM) to provide researchers with a model by which one can analyze and explain the different forms of motivation at different levels of generality (Gillet, Vallerand, Amoura, & Baldes, 2010). The foundational premise of the model is that social and personal determinants shape the specific motivation types of individuals, which are observable at various levels of analysis; the result of the identification of motivation type and level of generality is the ability to better predict the outcomes associated with each type of motivation (Vallerand &

Lalande, 2011). HMIEM indicates that motivation must be considered from a multidimensional

perspective, thus the traditional dichotomous view of intrinsic and extrinsic motivation has been

cast aside for a continuum in which the different types of motivation range from high to low

levels of self-determined motivation (Vallerand, 2000).

Motivational Constructs

The three basic constructs that comprise the continuum of self-determined motivation

include intrinsic motivation, extrinsic motivation, and amotivation (Gillet et al., 2010). Intrinsic

motivation refers to performing an activity or behavior strictly out of pleasure and satisfaction

that the activity provides (Gillet et al., 2010). However HMIEM holds that the majority of

behavior is not purely intrinsically motivated, and in fact individuals are generally motivated

extrinsically to a certain degree (Ryan & Deci, 2002). Within the continuum of self-determined

motivation, HMIEM identifies extrinsic motivation based upon relative autonomy and divides

the construct into four identifiable types of extrinsic motivation.

The first two types of extrinsic motivation are less self-determined and more greatly

affected by external sources. External regulation is the least self-motivated type of extrinsic

motivation and is identified as motivation that is regulated by external sources such as rewards,

punishments, or coercive pressures (Weiss & Amorose, 2008). The second form of less self-

determined extrinsic motivation is referred to as introjected regulation. Defined by partial

internalization of behaviors, introjected regulation is the category of motivation that

encompasses behaviors that are performed in order to gain social approval, elevate perceptions of

self-worth, or to avoid negative feelings and internal pressure (Thogersen-Ntoumani &

Ntoumanis, 2006). Individuals exhibiting introjected regulation are not fully self-determined to

engage in a behavior, but rather are participating in the particular activity to avoid feelings of

guilt or shame that may be associated with lack of participation (Gillet et al., 2010).

HMIEM also posits that two more self-determined types of extrinsic motivation exist along the continuum of motivation. Representing a relatively self-determined form of extrinsic motivation, identified regulation is characterized by the performance of behaviors out of choice despite the fact that the behavior itself may not be attractive or enjoyable to the individual (Ryan & Deci, 2002). For individuals possessing an identified regulation of motivation, activities or behaviors will be performed not because the activity itself is pleasurable or satisfying for the individual, but rather, individuals will engage in the particular behavior because they view it as personally important and believe that the behavior will result in significant benefits for the individual (Gillet et al., 2010). The final type of extrinsic motivation according to HMIEM is the most self-determined form and aligns closely with intrinsic motivation. Integrated regulation is more autonomous than any other form of extrinsic motivation because the individual takes regulations and accepts them through assimilation with his or her goals, values, and personal needs (Weiss & Amorose, 2008). Although the behavior is fully internalized by an individual demonstrating integrated regulation, that individual will only engage in the activity if it is in direct congruence with his or her personal values (Ryan & Deci, 2002). The one thing that separates integrated regulation from intrinsic motivation is that behaviors or activities are engaged in because the individual wishes to attain separable outcomes instead of simply taking on an activity or behavior for the pure enjoyment or satisfaction (Ryan & Deci, 2000).

The final type of motivation presented by HMIEM is amotivation. Classified as a lack of either intrinsic or extrinsic motivation, amotivation is seen in individuals for whom an activity possesses no inherent value or secondary value as a means through which desired outcomes can be reached (Thogersen-Ntoumani, 2006). Ultimately, according to HMIEM, individuals who

demonstrate amotivation toward a particular activity or behavior will have no intention of engaging in that behavior or will engage in the behavior, but will be unable to articulate a reason for their actions aside from habit. There will be a complete absence of motivation with regard to that behavior (Gillet et al., 2010).

Hierarchical Levels of Motivation

The second major premise of HMIEM is that each of the three motivation constructs, intrinsic motivation, extrinsic motivation, and amotivation, take place at three different hierarchical levels of motivation. Vallerand (2000) categorizes the three hierarchical levels of motivation as global motivation, contextual motivation, and situational motivation.

Located atop the hierarchy is the level of global motivation. Global motivation is the most general of the three levels and is characterized by an individual's personality or usual way of functioning (Vallerand & Lalande, 2011). It is a broad disposition to take part in activities in either an intrinsically or extrinsically motivated manner and is oftentimes considered the trait level of motivation (Vallerand, 2000).

The middle level of the hierarchy is occupied by contextual motivation. Referring to motivational orientations that are specific to a particular context, contextual motivation encompasses the specific life contexts of an individual such as work, leisure, or education (Vallerand, 1997). This level addresses the likelihood of an individual developing intraindividual motivation orientations that are specific to particular life contexts (Vallerand & Lalande, 2011). Contextual motivation enables one to accurately analyze the motivational orientation of an individual with regard to the particular context in which the individual is interacting.

Situational motivation occupies the lowest level of the hierarchy and is the most specific

of any of the levels. It is the state of motivation that an individual experiences at a specific

moment in time when engaging in a particular behavior or activity (Vallerand & Lalande, 2011).

Also referred to as state level motivation, situational motivation is ultimately the present

motivational orientation of an individual; it is the here and now of motivation (Vallerand, 1997).

Combined with the three motivational constructs presented by Vallerand, the hierarchical levels

of motivation allow a more refined analysis and understanding of motivational processes within

the framework of SDT.

Self-Efficacy Theory

In order for an athlete to exhibit self-determined behavior, the three fundamental needs of

SDT must be satisfied. Used as an explanatory theoretical framework for self-confidence in

sport, self-efficacy theory addresses the satisfaction of the fundamental need of competence.

Self-efficacy is the confidence or belief an individual has in their capability to execute the

courses of action that are required to attain a specific performance or performance outcome

(Bandura, 1997). The level of self-efficacy an individual has is directly correlated to the

perceived satisfaction of the need for competence, as both are defined by the importance that is

placed upon feeling effective in a particular behavior or task.

Self-efficacy does not only pertain to the regulation of physical performance or behavior,

but it also is applicable to thought processes, emotional states, and changing environments

(Vealey & Chase, 2008). It is a dynamic trait that takes several different forms in people,

including behavioral self-efficacy, cognitive self-efficacy, and emotional self-efficacy (Maddux

& Lewis, 1995). Those who demonstrate a stronger sense of self-efficacy in each of the three

areas, will be more likely to attempt new and challenging tasks, exert greater effort in the tasks

they are attempting, and persevere for a longer duration of time at those tasks (Wise & Trunnell,

2001).

Self-efficacy plays an important role in both the self-determined motivation of individuals and the performance of individuals in the physical domain (Wise & Trunnell, 2001). There are four sources of information that play a role in influencing perceptions of efficacy: mastery experiences, vicarious experiences, verbal persuasion statements, and physiological states (Bandura, 1977). Although each of these four sources are capable of influencing self-efficacy in different ways, each of the four has the potential to either strengthen or weaken an individual's perception of self-efficacy.

Mastery Experiences

Vealey and Chase (2008) state a complex process of self-persuasion defines the construction of self-efficacy. As part of this process, individuals utilize four sources of self-efficacy information, the most influential of which is known as enactive mastery experiences (Vealey & Chase, 2008).

Enactive mastery experiences occur when an individual attempts a specific task and subsequently receives direct information regarding his or her capabilities to effectively complete the task (Bandura, 1997). Successful task attempts will provide support for a stronger sense of self-efficacy for an individual, while failed attempts to complete a task will conversely weaken the overall perception of self-efficacy that an individual possesses (Wise & Trunnell, 2001).

Due to the fact that mastery experiences are comprised of the prior performances of an individual, they serve as the strongest predictor of perceptions of self-efficacy (Bandura, 1982). The success of an individual's task performance will then serve as a direct indicator of the level of self-efficacy, and in turn satisfaction of the need for competence, that an individual perceives to exist.

Vicarious Experiences

An individual's self-efficacy beliefs are not only affected by their own task performance, but those beliefs and perceptions can also be strongly influenced by the observation of a competent other's attempt at and performance of a task (Bandura, 1977). Individuals will often utilize observational learning or imitation as a source of self-efficacy construction, thus the success or failure of another individual at a task that is observed is often utilized to create one's own expectation of success at an identical task (Vealey & Chase, 2008).

While vicarious experiences have the potential to positively affect self-efficacy by providing information on how a competent individual attains success at a given task, the observation of failure can have a much greater effect. Individuals who witness a competent individual exhibit unsuccessful task performance are more likely to lower their perception of self-efficacy as their own ability is drawn into question (Wise & Trunnell, 2001). Individuals observing competent others' failures of performance will demonstrate a mentality that is defined by low expectations of success. It is important that individuals not only experience successful task performance, but that they also witness successful task performance by others in order to create a positive effect on their perception of self-efficacy (Wise & Trunnell, 2001).

Verbal Persuasion Statements

Another source of other influenced affective self-efficacy factors are verbal persuasion statements issued by significant others. This source of self-efficacy exhibits itself in the feedback an individual receives from a trusted significant other who is perceived to be competent at a given task (Bandura, 1982). The expression of belief in an individual's capabilities to complete a specific task by a knowledgeable outside source serves as a positive influence on

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self-efficacy, while the opposite is true of expressed doubts (Wise & Trunnell, 2001).

Although Bandura (1982) states that vicarious experiences are more powerful than verbal persuasion statements, the belief of others in an individual's chance of success is still significant in the development of positive self-efficacy. The optimal role of verbal persuasion statements is serving as a complement to the two more powerful self-efficacy sources (Bandura, 1997). Simple assertions that an individual can successfully complete a task are not as effective in promoting self-efficacy as those same assertions are when combined with enactive mastery experiences or vicarious experiences (Wise & Trunnell, 2001). However, as Bandura (1982, 1997) demonstrates, verbal persuasion statements are significant in the development or weakening of perceptions of self-efficacy in individuals. An individual who perceives that a person of influence in their life believes in the individual's ability to successfully complete a given task will be more likely to have such a belief in them self. Thus, verbal persuasion statements do carry some weight in the development of an individual's level of self-efficacy toward a given task or challenge.

Physiological States

The fourth source of self-efficacy information refers to the physiological state an individual experiences during a successful or failed attempt to perform a given task (Vealey & Chase, 2008). An individual will oftentimes associate a failed task performance with negative physiological and affect states, such as an increased heart rate, elevated respiratory levels, and anxiety (Vealey & Chase). However, those same physiological states can be associated with successful task performance as well; thus, the reactions themselves are not the affective factor on self-efficacy, but rather the interpretation and perception of those reactions is what determines the influence on self-efficacy (Bandura, 1997).

<center>**Achievement Goal Theory**</center>

The goal orientations an individual possesses and their subsequent effect on self-determined motivation is the final factor to be addressed. Representing the meaning that an individual assigns to situations of achievement, achievement goals provide the structure that defines an individual's perception of success and failure, motivation, and behavior (Harwood et al., 2008). The achievement goal theory of Nicholls (1989) creates a foundation of achievement goal analysis by focusing on the manner in which people define success and how that definition creates the individual's subsequent goal orientation. According to the theory, the main aim of an individual in the context of achievement is to demonstrate the highest level of competence while simultaneously avoiding the exhibition of low ability (Steinberg, Singer, & Murphey, 2000).

The key factor in Nicholl's (1989) approach to achievement goals is the division of goal orientations that is promoted. This achievement goal theory states that there exists two dispositional goal orientations that define the manner by which an individual constructs and evaluates his or her achievement goals (Harwood et al., 2008). Nicholls (1989) holds that individuals can be defined as possessing one of two achievement goal orientations: task goal orientation or ego goal orientation, or in some cases a combination of the two.

Task Goal Orientation

Exhibiting an undifferentiated conception of ability, the task-involved individual does not distinguish ability from effort (Kavussanu & Roberts, 1996). The task goal orientation is characterized by a focus on the successful learning and mastery of a task rather than merely the outcome of the task (Nicholls, 1989). Individuals possessing a task goal orientation view every task as an opportunity for personal growth and improvement; hard work, learning, and

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collaboration are key elements of the task goal orientation (Harwood et al., 2008).

Task orientation has been consistently associated with the belief that hard work is a larger determinant of success than mere ability. Nicholls (1989) proposes that when an individual adopts a task goal orientation, the result is most often a positive pattern of cognitive, behavioral, and affective behaviors. The task-involved individual generally demonstrates a higher level of intrinsic motivation as activities are taken on as an end in and of themselves, which is a fundamentally different perspective from that of the ego-involved individual (Kavussanu & Roberts, 1996).

Ego Goal Orientation

Contrasting the task goal orientation, the ego goal orientation is defined by a primary focus on an individual's performance of a task in comparison to the performance of others on the same task (Harwood et al., 2008). Individuals adopting the ego goal orientation assume the belief that every task is an opportunity to showcase their social status, superiority, and high ability at a given task (Harwood et al., 2008). In contrast to the task goal orientation, ego involved individuals possess a differentiated concept of ability, viewing ability as an entirely different concept than effort (Kavussanu & Roberts, 1996).

By definition, ego involvement is not conducive to the development of intrinsic motivation; activities are viewed as a means to an end rather than being seen as an end in themselves (Nicholls, 1989). Thus, the ego-involved individual will experience greater fluctuations in competence satisfaction and intrinsic motivation, as performance outcome and social comparisons are the foundations of the goal perspective (Duda, Chi, Newton, Walling, & Catley, 1995). The self-determined motivation of an ego-involved individual will directly correspond to the successes or failures that an individual has at a given task. This being the case,

when compared to individuals who possess a task involvement goal orientation, the ego-involved individual will generally experience a lesser level of self-determined motivation as the result of a task is the only manner in which they evaluate their motivation and confidence in the task.

Application of Theory to Sport

While each of the three reviewed foundational theories originated within the disciplines of education and psychology, their applicability has been carried over to the study of sport psychology as well. The research shows that self-determined motivation, self-efficacy, and achievement goals shape the motivational constructs of an individual, thus, it is imperative that collegiate coaches understand how these theories apply to athlete motivation and how the knowledge can be utilized to increase self-determined motivation amongst their athletes.

Increasing and developing self-determined motivation in athletes is an issue of great concern for coaches in the collegiate sport setting. As Ntoumanis, Edmunds, and Duda (2009) concluded, athletes who are more self-determined in their motivation toward sport, experience a greater likelihood of adaptive and flexible responses to the stresses involved in the sport setting. Generally speaking, this type of motivational orientation has also shown to be positively correlated to improved sport performance, physical functioning, and overall well-being of athletes (Deci & Ryan, 1991; Sheldon et al., 1997; Weiss & Amorose, 2008).

While collegiate coaches cannot control the motivation of their athletes, they can control several of the most important determinants of athlete motivation. By focusing on increasing the satisfaction of the three fundamental needs, autonomy, competence, and relatedness, coaches can create a sport environment that encourages self-determined motivation. Individuals who perceive higher levels of basic need satisfaction will exhibit more self-determined forms of extrinsic motivation toward a behavior or activity, or even become purely intrinsically motivated

to participate (Ryan & Deci, 2000). Applied to sport, research shows a positive relationship

between intrinsic motivation and greater sport participation, positive mental health benefits, and

elevated self-esteem (Frederick & Ryan, 1993). This evidence is important in the realm of sport,

as individuals participating in sport activities were motivated to a greater degree by interest in

the given activity and the desire to fulfill the fundamental need of competence, than those

individuals involved in fitness activities only (Frederick & Ryan, 1993). In comparing these two

groups of physical activities, Frederick and Ryan (1993) showed that individuals participating in

sport activities as opposed to fitness activities focused on the task itself as the primary reason for

participating. This underlines the importance of creating a motivational supportive environment

for athletes during the off-season, as task driven participation is strongly tied to the overall

intrinsic motivation of an individual toward an activity. The satisfaction of the fundamental

needs is significant to the development of self-determined motivation; however, research has

also shown that individually, each basic need has a different effect on an athlete's motivational

orientation.

Shown to be the strongest predictor of an athlete's motivational orientation, autonomy is

the perception that an athlete is the source of his or her own behavior and is not being coerced

into action by an external force (Amorose & Anderson-Butcher, 2007). Amorose and Anderson-

Butcher examined how perceived autonomy-supportive coaching behaviors related to athletes'

motivation, with specific emphasis being placed on the prediction that perceptions of basic needs

satisfaction will mediate the relationship between perceived autonomy support and athletes'

motivational orientation. It was discovered that the satisfaction of all three basic needs was a

positive predictor of an individual athlete's motivational orientation. The more an athlete

perceived their basic needs of autonomy, competence, and relatedness to be fulfilled by the

coaching style employed by their coach, the more apt they were to possess a self-determined reason for participating in the sport (Amorose & Anderson-Butcher).

The study also illustrated that the degree to which the participating athletes perceived their coaches to be autonomy-supportive was in direct and positive relation to the athletes' perception of the fulfillment of each of the three basic needs. However, of the three needs, autonomy-supportive coaching was shown to have the strongest link to an athlete's sense of autonomy, while also indirectly affecting their motivational orientation. Athletes, who perceive a greater sense of autonomy, were shown to demonstrate higher levels of self-determined motivation (Amorose & Anderson-Butcher, 2007). Thus, the autonomous motivation of an individual, will not only enhance the task performance of that individual, but increased levels of task persistence, confidence, and interest will manifest themselves as well (Deci & Ryan, 1991).

Ntoumanis et al. (2009) provide further evidence for the importance of satisfying an individual's need for autonomy in the sport setting, arguing that autonomous behaviors emanate from an individual's personal volition, stating athletes who perceive the satisfaction of autonomy will possess higher levels of self-determined motivation, which will in turn result in a greater likelihood of adaptive and flexible responses to the stresses involved in the sport setting. This argument is backed by a number of empirical studies that contrast the end results of individuals who are authentically or autonomously motivated toward an activity with those who are being externally motivated. These studies generally confirm that autonomous motivation as opposed to external motivation results in enhanced performance, persistence, confidence, and interest (Deci & Ryan, 1991; Sheldon et al., 1997).

A study conducted by Amorose and Anderson-Butcher (2007), which sought to better understand and test the process by which various coaching behaviors influence athlete

motivation, found that when examining the three fundamental needs, feelings of autonomy were the strongest predictor of an individual's motivational orientation. This study sought to identify the effect of perceived autonomy-supportive coaching style on the relationship between coaching style and athlete motivation (Amorose & Anderson-Butcher, 2007). Athletes who perceived a greater sense of autonomy within their particular sport environment showed more self-determined reasons for sport participation and demonstrated a higher level of intrinsic motivation. Comparing results amongst male and female athletes, as well as high school versus collegiate athletes, did yield some differences in the overall motivational profile of each athlete and the effect of autonomy-supportive coaching behavior on that profile. However the authors also conducted a multi-group analysis on the data, which indicated that the patterns of relationships between an athlete's perceived sense of autonomy-supportive coaching behavior, perception of the fulfillment of their own fundamental needs, and the individual's overall motivational orientation were similar across all groups of athletes (Amorose & Anderson-Butcher, 2007).

Although SDT speculates that each of the fundamental needs must be satisfied in order to have a significant positive effect on the motivational orientation of an individual, Amorose and Anderson-Butcher (2007) showed that autonomy carries the greatest weight in the shaping of an individual's motivational orientation. The study identified autonomy as the key motivational construct for the development of self-determined motivation in athletes, followed by the athlete's perceived sense of relatedness and competence respectively. Fundamental to establishing strong self-determined motivation toward a particular sport or activity, individuals flourish in situations and climates that promote and fulfill the psychological need of autonomy.

Competence has not proven to be the most salient of the fundamental needs to athlete

motivation, yet the satisfaction of an individual's competence still promotes self-determined motivation (Ntoumanis, 2001). More effectively addressed by Self-Efficacy Theory, competence satisfaction requires that an individual believe they are capable of executing the courses of action that are required to obtain the desired performance outcome (Bandura, 1997). Pertaining to the regulation of physical performance, mental thought processes, and emotional states, self-efficacy is directly correlated to the satisfaction of competence, and subsequently the development of self-determined or intrinsic motivation (Vealey & Chase, 2008). Determined by the mastery experiences, vicarious experiences, verbal persuasion statements, and psychological states that an athlete experiences (Bandura, 1977), self-efficacy is an important determinant of both basic need satisfaction and intrinsic motivation development toward sport.

Building upon the ideas put forth by Self-Efficacy Theory, Vealey (1986) carried the fundamental theoretical characteristics over to sport, developing a model for measuring and analyzing self-efficacy in sport. Using the adapted model, Vealey (1986) termed self-efficacy in sport as sport-confidence, describing the term as a representation of an athlete's belief or level of certainty that the particular individual has in their own ability to effectively and successfully perform a given sport activity.

Conducting a multi-phase study on the most salient forms of sport-confidence to individual athletes, Vealey and Knight (2002) identified three specific areas of sport-confidence to most greatly affect anxiety, coping skills, and performance in athletes. Identified as being the most salient factors to determining effective sport performance and self-determined motivation, Vealey and Knight (2002) found that athletes who demonstrate sport-confidence in the categories of physical skills and training, cognitive efficiency, and resilience were more likely to possess a positive and self-determined motivational orientation.

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Another example of the effect of competence support on motivation is a study examining the empirical links between achievement goal theory and self-determination theory in sport, in which Ntoumanis (2001) showed that high perception of competence in individuals was positively related to a higher level of self-determination toward an activity. In other words, competence can be viewed as a unitary human need that when satisfied will promote a more advanced level of self-determined motivation in an individual. This study focused on examining the link between SDT and achievement goal theory in sport. While these two theories share a number of similarities, in order to examine the empirical links between the two, Ntoumanis (2001) emphasized focusing on the independent and interactive effects of various individual goal orientations and levels of perceived confidence on the level of self-determined motivation in each individual.

In analyzing the effect of an athlete's goal orientation on their overall level of self-determined motivation, the study concluded that there is an overwhelming tendency for athletes who possess a strong inclination toward forming task oriented goals to feel more self-determined toward the sport in which they are participating (Ntoumanis, 2001). Ntoumanis determined that because task involved athletes enjoy the challenge of learning new sport skills and improving upon the skills that are the weakest, these athletes exhibit a greater sense of self-determined motivation. Being guided by a task involved goal orientation allows athletes to set goals that are both controllable and attainable, providing encouragement to maintain motivation to achieve in sport and to remain committed to the task at hand (Ntoumanis, 2001).

Addressing the fundamental need of competence, Ntoumanis (2001) found that as predicted high levels of perceived confidence in athletes was in positive relation to self-determined motivation, however the unexpected finding was that in those same individuals who

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possessed high perceptions of competence, there was also a positive prediction of external regulation as well. Thus, the conclusion drawn is that while high perceived competence is an important factor in developing self-determined motivation in athletes, if an athlete associates this perception of competence with extrinsic outcomes, such as using sports as a mean by which superiority can be demonstrated, the motivational orientation will transition from being self-determined to becoming almost purely extrinsic (Ntoumanis, 2001).

Completing the trio of fundamental needs, relatedness differs from the previous two needs as its role in the development of self-determined motivation lies in the facilitation of the process of internalization of behaviors and values. Individuals will more readily internalize the actions and values of those with whom they share the greatest connection (Niemic & Ryan, 2009). As Ryan and Grolnick (1986) found, when an individual perceives their leader to be uncaring and unsupportive of relatedness, the level of self-determined motivation is greatly reduced. Thus, while relatedness has been the least often researched fundamental need, collegiate coaches cannot ignore the effect that a lack of relatedness can potentially have on athlete motivation.

Finally, the literature and research shows that the construction and evaluation of goal orientations in sport play a large role in the overall self-determined motivation of an athlete. Individuals who are taught to adopt a task goal orientation will be more highly self-determined in their motivation orientation, as every task, regardless of difficulty or interest level, is viewed as a learning opportunity that provides the individual with the chance to develop personal growth and improvement at the given task (Harwood et al., 2008). Generally speaking, the individual who is task involved in their goal orientation will demonstrate greater intrinsic motivation as each task is taken on as an end in and of itself (Kavussanu & Roberts, 1996).

A 2006 study focused on the effect of having task driven goals rather than ego driven goals, as groups of students in a physical education class were asked to complete a golf putting task under the guidance autonomous communication or controlling communication (Spray, Wang, Biddle, & Chatzisarantis, 2006). Spray et al. (2006) found that by controlling the manner in which the teacher or coach interacted with the athlete, the goals that each individual associated with the task were affected which in turn played a role in that individual's motivation for persisting at the task and striving for success. The controlling communication style was characterized by students feeling pressured to think or act in a specific way, while the autonomous style encouraged the students to make their own decisions and choices regarding the putting task (Spray, et al., 2006). Although there were shown to be no significant correlations between ego involvement and free-choice enjoyment and behavioral consequences, the study did identify a trend for positive intercorrelation between autonomous communication and self-determined motivation but a negative association between the self-determination of an individual and a controlling environment and communication style (Spray, et al., 2006).

Ultimately, what this means for the collegiate sport coach is that the climate that he or she creates for his or her athletes can have an effect on the behavioral outcomes and motivational orientation of their athletes toward the particular sport or training task. Spray et al. (2006) suggest that establishing an autonomy supportive sport climate can enhance the intrinsic motivation of athletes as compared to a controlling climate. The perception of an autonomy supportive environment is more likely to lead to the construction of task oriented goals that are controllable and attainable, helping to foster self-determined motivation in the athletes. So instead of being motivated the desire to showcase their superiority, effectiveness, or overall talent level, individuals who are taught to develop goals based upon a task involved approach

will demonstrate a higher level of self-determined motivation, as the outcome of each task is not

the sole criteria by which success, efficacy, and motivation are determined (Harwood et al.,

2008).

Part Three

Introduction

Based upon the reviewed literature, it is apparent that collegiate coaches must possess an understanding of the fundamental needs and motivational orientations of their athletes if they are to develop and implement that most effective coaching style for enhancing the self-determined motivation of their athletes toward the sport and the subsequent off-season training behaviors and activities that are required. Although a plethora of factors can and do influence an athlete's motivational orientation, none are more important than the relationship between the athlete and their coach (Mageau & Vallerand, 2003). Due to the fact that the coach has the ability to manipulate the sport and training environment that is perceived by the athlete, it is the duty of the coach to structure their coaching style and sport environment in such a way that self-determined motivation is fostered in each athlete to the greatest extent possible. By focusing on four specific areas of influence, collegiate coaches can more efficiently promote an atmosphere of self-determined motivation amongst his or her athletes.

The following sections will address the four areas of influence, autonomy, competence/self-efficacy, relatedness, and goal setting, outlining a number of conclusions and recommendations that can be adopted by any coach to cultivate an aura of self-determination for his or her athletes and team during the off-season. Based upon the relevant sport motivation literature reviewed, the subsequent recommendations will serve as an ideal motivational framework for the collegiate coaching looking to enhance the overall self-determined motivation of student-athletes in the off-season.

Developing an Ideal Motivational Framework

Autonomy

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As identified by Amorose and Anderson-Butcher (2007), autonomy has proven to be the strongest predictor of an athlete's motivational orientation, and thus should be the number one priority for a coach looking to enhance self-determined motivation. In order for a coach to satisfy an athlete's need for autonomy it is imperative that the athlete perceives that his or her thoughts and behaviors are freely chosen and are not being coerced into action by a controlling coach (Ryan & Deci, 2002). However, this does not mean that the athletes must believe that they are entirely independent from external influence. In order to perceive a sense of autonomy, an athlete can, and in fact will, act upon the values and behaviors of an external source such as their coach while also maintaining their sense of autonomy if those values and behaviors are congruently endorsed by the athlete themselves (Ryan & Deci, 2002). This means that in order to best serve their athletes and promote the development of self-determined motivation, collegiate coaches must focus on developing and utilizing an autonomy-supportive coaching leadership style.

The support of an athlete's autonomy is one of the fundamental factors in developing self-determined motivation, thus it is imperative that collegiate coaches adopt and utilize a leadership style that is autonomy-supportive. Being an autonomy-supportive leader means that as a person of authority, one takes into account the perspective and feelings of those he or she is leading, and provides them with pertinent information to succeed without overusing pressures and demands (Black & Deci, 2000). Succinctly stated, an autonomy-supportive coach places value upon self-initiation and encouragement of choice amongst his or her athletes. The autonomy-supportive coach must adopt the viewpoint that athletes are individuals who deserve to exert self-determination and are not merely pawns of the coach being controlled to obtain a specific outcome (deCharms, 1968). In order to have the greatest positive effect on their

athletes' motivational orientation, the application of an autonomy-supportive leadership style should be implemented.

In order to develop an autonomy-supportive coaching leadership style, Mageau and Vallerand (2003) have put forth seven areas of influence that a coach should focus on in order to craft the autonomy-supportive coaching style. The seven characteristics of the autonomy-supportive coaching style provide the means by which collegiate coaches can fulfill an athlete's need for autonomy, and in turn enhance self-determined motivation toward the specific sport and the training activities that are required during the off-season.

The first thing that a coach must develop and incorporate into their coaching style concerns the amount of choice that is afforded to the athletes during the off-season. Coaches must provide athletes with as much choice as possible within the rules and limits of the team in order to most effectively satisfy the fundamental need for autonomy (Mageau & Vallerand, 2003). Goudas, Biddle, Fox, and Underwood (1995), showed that in comparing the intrinsic motivation of two different physical education classes, students who were members of the class in which the teacher allowed students to make choices and decisions regarding the activities and training that was being conducted demonstrated a much higher level of intrinsic motivation toward participation in the class, including the activities that were inherently less enjoyable, than students in a class that provided no choice.

Collegiate coaches looking to enhance off-season motivation must focus on providing this choice to athletes. Although a number of the activities and training regimens that a collegiate athlete must complete during the off-season are not necessarily enjoyable, a coach who focuses on providing athletes with choice regarding off-season components such as time of day for training sessions, the teammates with whom an athlete trains, and even to a certain extent the

training activities the athlete is completing on a day to day basis, will find that this entitlement being afforded to the athletes will result in a stronger sense of self-determined motivation toward these inherently difficult off-season tasks.

The second area of influence can be easily accomplished by the collegiate coach, yet will still make a large impact on the overall motivational orientation of the athletes. It is imperative that in the quest for developing an autonomy-supportive coaching style, the coach works to provide athletes with a rationale for both the task they ask the athletes to complete during the off-season as well as the rules they require the athletes to abide by. Providing logical rationale for the requirements of the athletes during the off-season can facilitate the internalization of the reasons for engaging in those very same activities (Mageau & Vallerand, 2003). Along those same lines, asking athletes to identify their own goals for sport participation would provide the coach with the opportunity to demonstrate how the off-season tasks that are required will help each athlete reach his or her personal goals. The importance of addressing this area of autonomous leadership lies in the fact that when an athlete is explained the overall benefit and value of a particular activity, the underlying values will be more easily internalized and the athlete will in turn become self-determined to complete the given task. When the rationale for a task is adequately explained to the athletes, the task will then become meaningful making its underlying values easier for the athlete to integrate and accept (Mageau & Vallerand, 2003).

Therefore, in the case of the collegiate sport setting, during the training and preparation period that is the off-season, coaches must transmit the value of tasks such as heavy weightlifting or rigorous cardio training to their athletes so that participation in the task is not merely an induced behavior, but actually self-determined (Vallerand & Rousseau, 2001). The key factor in providing such rationale however is that the statements made by coaches regarding the reasoning

behind why a particular off-season training activity is being performed must be perceived to be logical, truthful, and valid. Athletes will only internalize a coach's rationale for an activity when that rationale is deemed to be reasonable and true (Mageau & Vallerand, 2003).

Along with providing choice and rationale to athletes, in order to create an autonomy-supportive environment and spur the growth of self-determined motivation coaches need to concentrate on acknowledging the feelings and perspectives of their athletes. One of the earliest studies on athlete motivation found that to promote self-determined motivation for sport activity, it is essential for the coach to perceive the athlete as an individual possessing very specific fundamental needs which must be satisfied (deCharms, 1968). The athlete cannot be viewed as anything less than this, as such a view would relegate the athlete to a position that was completely controlled by external forces and had zero sense of autonomy. This sentiment is key to the formation of an autonomy-supportive coaching style. Whether it is boredom, resentment, anger, or pleasure, by acknowledging these feelings in their athletes and adjusting their daily off-season activities and tasks accordingly, coaches will foster a greater sense of autonomy fulfillment in the athletes. This will lend itself to the cultivation of the coach-athlete relationship into a two-way avenue for the exchange of ideas and feelings regarding daily motivational orientations.

While it is the job of a coach to provide support to his of here athletes so that they can succeed at every endeavor, coaches who provide support when it is unwarranted or prevent athlete from being independent in any phase of their off-season training will be perceived to be exerting controlling support (Mageau & Vallerand, 2003). Thus, the fourth area of focus for the collegiate coach should be to allow athletes to take the initiative and act independently at various times throughout the off-season. Boggiano (1998) showed that in the educational domain

allowing individuals the opportunity to act independently and take the initiative with certain tasks, children were given the opportunity to decide to some extent what they did in class, how to utilize their free time, and how to best complete their work, reported a much higher level of self-determined motivation toward the activities than those children who were told exactly what to do. Applied to the off-season of a collegiate sport, these results suggest that when a coach coerces his or her athletes into following their instructions exactly, the athletes' opportunity to be autonomous and self-determined is greatly weakened. Providing athletes with the ability to approach off-season training tasks with a strategy of their own can go a long way toward developing self-determined motivation to complete that task. However, the coach cannot allow this choice and autonomy to jeopardize the end goal of any given task or training period.

Although in order to fulfill an athlete's fundamental need of autonomy a coach has to provide the athlete with choice and some degree of freedom, it is still the responsibility of that coach to provide feedback to the athlete, whether it is positive or constructive criticism. Ryan (1982) argues that positive feedback is an essential part of maximizing intrinsic and self-determined motivation and consists of an informational and controlling aspect. The informational aspect provides an athlete with an evaluation of his or her competence, while the controlling aspect encourages the re-emission of the desired behaviors (Mageau & Vallerand, 2003). With this in mind, the fifth area of influence a coach must focus upon to fulfill the need of autonomy is to provide non-controlling competence feedback.

The feedback that a coach provides to his or her athletes should support the autonomy and competence of the athlete, address only those behaviors and characteristics which the athlete can personally control, and suggest an attainable and realistic expectation for future performance. Should a coach construct their feedback with these characteristics in mind, the likelihood for the

enhancement of self-determined motivation will be elevated.

The sixth of the seven key factors to developing an autonomy-supportive style is for coaches to take every measure possible to avoid overly controlling behavior in their coaching style (Mageau & Vallerand, 2003). Whether they exhibit overt control over their athletes or simply utilize guilt-inducing statements and criticism, coaches who behave in a controlling manner toward their athletes are less likely to see any form of self-determined motivation in the off-season as athletes will exhibit a more extrinsic motivational orientation and overall improved well-being (Ryan, 1982). Coaches who exhibit overly controlling behaviors will foster an environment where athletes perform the required tasks out of fear of punishment or simply to gain some external approval or reward. This is dangerous territory for any coach as athletes who adopt the ideals of an overtly controlling coach will demonstrate a stronger tendency to exhibit high levels of ego involvement which over time leads to a great reduction in self-determined sport motivation (Ryan, 1982).

This leads directly into the final point of emphasis in developing an autonomy-supportive coaching style. Along with avoiding exhibiting overly controlling behaviors, it is important for the coach to focus on preventing ego-involvement in his or her athletes (Mageau & Vallerand, 2003). In an ego-involved athlete, the focus will shift from the attainment of self-referenced goals to a focus on external comparisons and behavioral outcomes (Nicholls, 1989). Coaches who do not prevent ego involvement in their athletes will find that behavioral outcomes become so important to the athletes that they will no longer be able to act in any manner other than that which is dictated by the coach, all sense of autonomy will be lost (Mageau & Vallerand, 2003). This type of behavior poses a threat to any opportunity for an athlete to develop self-determined motivation toward the necessary tasks of the off-season. By limiting the tangible rewards for

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successfully completing tasks and deemphasizing the importance of behavioral outcomes, coaches will be able to shift the focus of the athlete away from the ego-involvement and more toward task-involvement. This movement will allow the athlete to develop a self-determined sense of motivation toward each off-season task as they focus on improving themselves and improving the effectiveness with which they complete each training task rather than simply trying to outdo the other athletes.

By addressing the aforementioned seven values of an autonomy-supportive coaching style, collegiate coaches can more effectively promote a healthy relationship with their athletes and increase the perceived fulfillment of the fundamental need for autonomy, which has been shown to create both positive affective outcomes as well as higher self-determined motivation and sport performance (Mallet, 2005). The coach who supports his or her athletes through the use of an autonomy-supportive coaching style will not only create the optimal environment for fostering the fulfillment of individual autonomy, but they will also benefit the remaining fundamental needs of competence and relatedness leading to an enhancement of the athletes' self-determined motivation toward the off-season sport tasks.

Competence and Self-Efficacy

Although autonomy has proved to be the most salient of the fundamental needs when it comes to the effect they have on the development of self-determined motivation in athletes, collegiate coaches cannot afford to overlook the importance of satisfying the need for competence in their athletes. As Ntoumanis (2001) showed, competence has proven to be a unitary human need that when satisfied provides for the promotion of self-determined motivation in individuals. It is a highly effectible fundamental need that can be easily manipulated through social-contextual events like communication and feedback from a coach. This makes the

feedback that a coach provides his or her athletes very important as studies have shown that individuals who receive positive feedback from external sources, such as a coach, report higher perceptions of competence and are more inclined to approach a task for reasons prompted by self-determined motivation (Mageau & Vallerand, 2003). Thus, in order to positively affect and fulfill an athlete's need for competence as well as self-efficacy, collegiate coaches must focus specifically on the types of verbal persuasion statements they are providing to their athletes and understand the subsequent effect of those statements on the athlete's perception of competence and self-efficacy, as they strive to develop self-determined motivation in their athletes.

As previously mentioned in the literature review, verbal persuasion statements exhibit themselves as the feedback an individual receives from a trusted significant other who is perceived to be competent at a given task (Bandura, 1982). As this trusted significant other for a college athlete, collegiate coaches are in a position to have a profound positive effect on an individual's sense of competence and self-efficacy.

Although verbal persuasion statements in and of themselves are not the most effective method by which self-efficacy and competence are promoted, when combined with the enactive mastery experiences provided by off-season training and practice sessions, effect use of effectual verbal persuasion statements by the coach will serve as the optimal way for developing a positive sense of self-efficacy and competence in an athlete (Bandura, 1997). Collegiate coaches must provide athletes with sufficient opportunities to form positive enactive mastery experiences during the off-season offering significant repetitions of the required training tasks so that the athlete can experience successful task attempts and utilize that information to repeat and improve on the successful attempt. However, the key to capitalizing on those enactive mastery experiences and to limiting the negative effects of failed attempts on self-efficacy and

competence, is to effectively utilize verbal persuasion statements to provide the athletes with valuable feedback on their performance.

The key to providing athletes with effective verbal persuasion statements is for coaches to structure their feedback in a manner that is positive and non-controlling. The persuasion statements utilized by a coach must contain information regarding the specific task or behavior that they are providing feedback for and cannot address uncontrollable factors in order to be effective. Effective verbal persuasion statements only address those specific behaviors and factors that can be directly controlled by the athlete, as the acknowledgment of any external factors can lead to an athlete perceiving that he or she is incapable of improving upon the given task. These statements can also be detrimental to self-efficacy and competence if they convey low or unrealistic expectations (Mageau & Vallerand, 2003). Coaches who continually provide athletes with the persuasion statements that communicate low expectations will actually help convince their athletes that they are not competent enough to achieve anything but the bare minimum, this can have a very dramatic and negative effect on self-efficacy and must be avoided.

The promotion of self-efficacy and competence in collegiate athletes is paramount to the development of self-determined motivation toward off-season sport activity. The coach must provide athletes with the opportunity to experience and succeed at the tasks of the off-season by given them enactive mastery experiences, yet they must also be ready to off-set the negative effects on self-efficacy and competence that a failed attempt in an enactive mastery experience will have. The verbal persuasion is the method by which this can be accomplished, and if the coach successful structures the message in a way that supports the autonomy and competence of the athlete, addresses only those behaviors which the athlete can directly control, and suggests

attainable and realistic expectations for future attempts of the enactive mastery experience, the result will be the desired boost in self-efficacy and competence that will enhance the self-determined motivational orientation of the athlete toward the given task.

Relatedness

For the collegiate coach seeking to enhance off-season self-determined motivation simply addressing autonomy and competence is not enough. The off-season is a very difficult and not inherently enjoyable time of the year for collegiate athletes as the physical and mental demands of their sports are very high and come without the reward of in-season competitions. Due to this fact, it is essential to the continued development of off-season self-determined motivation, that the collegiate coach develops a sense of relatedness between himself or herself and the athletes and also between the athletes themselves.

The need for relatedness is characterized by the need for an individual to perceive a connection to those around them, as well as experience a sense of belongingness (Weiss & Amorose, 2008). In order to fulfill this need the collegiate coach must address two specific characteristics. First, coaches must provide athletes with frequent and enjoyable interactions with others. Conducting off-season training sessions as an entire team helps to build the team camaraderie and allows the athletes to push one another toward improvement. During these sessions it is important for coaches to coach their athletes, but also to do so in a way that is not controlling, overly aggressive, or fear inspiring as each of those characteristics lends itself to making the overall experience less enjoyable and detrimental to sense of relatedness. Additionally, providing athletes with small benefits such as music in the weight room during workouts can greatly add to the enjoyment factor and foster a sense of relatedness amongst the athletes.

Secondly, the coach must ensure that the previously mentioned interactions occur within an environment that is both stable and centered around the concern for each individual's basic welfare (Baumeister & Leary, 1995). This ties directly back to establishing an autonomy-supportive style of coaching, as one of the seven characteristics is to be aware of the feelings and perspectives of the athletes. Coaches must show that they value the opinions and feelings of the athletes they are in charge or and that the genuinely care about their well-being. This means that injuries cannot be ignored because they may limit the training session and athletes cannot be viewed simply as a pawn in the coach's overall master plan. Athletes who perceive their coach to be cold or uncaring will most certainly demonstrate a lesser sense of self-determined motivation as their fundamental need for relatedness is not being met. However, when a coach shows that they are concerned with the individual athlete's general welfare, a connection is developed that will lead to athletes more readily accepting the actions and values of their coaches.

Relatedness has been the least studied of the fundamental needs, yet its importance to the development of off-season self-determined motivation cannot go unnoticed. Coaches must work to create a perceived sense of relatedness by establishing frequent and enjoyable interactions with their athletes in an environment that is stable and centered around an overall concern for each individual athlete's general well-being.

Goal-Setting

The final factor that a coach must address in order to develop the most effective motivational framework is the process of goal setting. The goals that are set by coaches, teams, and athletes are critical to the development of self-determined motivation toward that sport, as those goals are the standards by which individuals perceive success and failure, and assess the

degree to which what they are looking to get out of their sport matters to the coach (Harwood, et al., 2008). In order for a coach to foster an environment of self-determined motivation, the goals that are set must demonstrate the highest level of competence while simultaneously avoiding the exhibition of low ability. This can be very difficult as excessively high goals oftentimes result in failures and decreased motivation, while goals that are underachieving never push an athlete or team to its ultimate potential allowing them to settle and never be motivated to achieve greater things. While this assessment implies that the creation of the optimal goal for inspiring self-determined motivation is not possible, the truth is that by simply altering the characteristics by which a goal is defined a coach can help athletes set goals that are not only attainable, but also encourage and promote the motivation for improvement.

In order to create the most effective achievement goals for both individual players and the team as a whole, collegiate coaches must structure all goals using a task goal orientation. This goal orientation is characterized by a focus on the successful learning and mastery of a task rather than merely the outcome of the task (Nicholls, 1989). Consistently associated with the belief that hard work is a larger determinant of success than ability alone, task oriented goals result in a positive pattern of cognitive, behavioral and affective behaviors. Rather than instructing athletes to set goals that focus on specific outcomes of tasks such as running the fastest sprint on the team or lifting the most weight, coaches should push athletes to structure goals in such a way that every task is viewed as a chance to develop personally at that given task.

The coach who teaches athletes to set goals based upon personal growth and skill improvement will see the greatest gains with regard to self-determined motivation in the off-season. By focusing on the personal growth aspect of goal setting, athletes will not only set goals that push themselves to improve and avoid underachievement, but this task goal orientation

will also lend itself to the creation of goals that are reasonably attainable and realistic, as demonstrating superiority or overall talent level are no longer the standard by which the goals are judged. Promoting and establishing a task goal orientation amongst athletes will allow the coach to increase the likelihood of the athletes being more highly self-determined in the motivation orientation, as every task, regardless of difficulty or interest level, will become viewed as a learning opportunity that provides the individual with the chance to develop personal growth and improvement at the given sport task.

Conclusion

Given the importance of off-season training to the overall success of athletes in collegiate athletics, coaches must focus on utilizing a coaching style and creating a sport environment that is ideal for the enhancement of self-determined motivation in their athletes. Off-season training is notoriously difficult and not inherently enjoyable for most athletes, thus it is all the more important for coaches to work on the development of the self-determined motivation of athletes toward the difficult and less enjoyable aspects of the off-season. Provided that coaches are made aware of the determinants of athlete motivational orientations, steps can be taken to ensure optimal levels of motivation, commitment, and effort of athletes in the off-season.

The first step toward augmenting the self-determined motivation of athletes during the off-season training period is to develop and exhibit an autonomy-supportive coaching style. Coaches who are perceived to be autonomy-supportive are more likely to satisfy the three fundamental needs of their athletes than those who possess a controlling leadership style. Research shows that athletes who are autonomously motivated display higher levels of interest, excitement, performance, persistence, and effort toward their sport (Ryan & Deci, 2000). Thus, it is important that a coach is perceived to be supportive of the autonomy of his or her athletes.

As posited by Mageau and Vallerand (2003), to develop an autonomy-supportive coaching style, coaches should focus on seven areas of influence with their athletes. In order to coach in an autonomy-supportive way, coaches should provide choice within specific rules and limits, provide rationale for tasks and rules, acknowledge the feelings and perspectives of the athletes, provide athletes with opportunities to take the initiative in their training, provide non-controlling feedback to athletes, avoid coaching in an overly controlling manner, and limit the ego-involvement of their athletes (Mageau & Vallerand, 2003).

While each of these seven areas of focus are important to fostering self-determined motivation amongst athletes, of particular relevance to off-season training motivation is the provision of rationale for the tasks and requirements coaches demand of their athletes. Due to the fact that training in the off-season is not inherently enjoyable for most athletes and includes activities that are both physically and mentally demanding, coaches must work to transmit the value of the activities and tasks to their athletes so that participation is not merely an induced behavior, but actually a behavior that is self-determined.

Coaches must also provide their athletes with positive, yet constructive feedback that is not overtly controlling. Coaches are responsible to provide their athletes with feedback, whether it is positive, negative, or constructive; however, the way in which an athlete perceives the delivery of feedback is essential to the development or hindrance of self-determined motivation. The off-season is the most integral time in collegiate athletics for the individual development of athletes, so coaches who constantly provide athletes with negative or controlling feedback will see a decrease in the subsequent motivation of the athlete to complete the necessary off-season training tasks. The feedback a coach offers his or her athletes should support the autonomy and competence of the athlete, address only the behaviors that the athlete can personally control, and

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suggest a realistic expectation for future performance. It is important that athletes feel support in the feedback they receive, yet at the same time athletes need to know that their coaches are actively working to better the athlete and are making valuable contributions to the athlete's development during the off-season. Coaches should not be afraid to constructively criticize the training performance of an athlete, but effective and successful task performance by the athletes should not go unnoticed.

Finally, when it comes to the off-season training of athletes, the way in which a coach structures the training goals for his or her athletes will have a large impact on the motivation the athletes have to complete the tasks that will lead to the achievement of those goals. Coaches should structure their off-season training program so that the goals that are set for the athletes are not only challenging, yet attainable, but also so that those goals are task rather than ego-oriented. Research has shown that individuals adopting a task goal orientation generally display a positive pattern of cognitive, behavioral, and affective behaviors. Thus, by promoting a task focused goal orientation, the probability of elevated levels of off-season motivation and training results amongst athletes will increase.

Coaches must also focus on the content of the goals themselves and not simply the type. College athletes are competitors by nature; thus, in order to increase the self-determined motivation of these athletes in the off-season, coaches must help athletes set goals that focus on personal growth and improvement and encourage competition with themselves as well as with their teammates. For example, a strength and conditioning coach can increase an athlete's self-determined motivation toward improving in the weight room during the off-season by setting a standard for strength in each of the major lifts. Athletes who reach this standard would receive recognition of their accomplishment, such as the public display of their name on an honor roll or

leader board in the athletic complex. This type of competition will help athletes strive to attain goals that are more task involved as they compete to reach the set standard; however, the standard should be set in such a way, that the goal is an attainable weight so as to support the self-efficacy of the athlete. Setting goals that are unattainable in the off-season will limit the perception of self-efficacy amongst athletes and research has shown that in order to demonstrate self-determined motivation toward a task, an individual must feel efficacious in their ability to reach that goal.

Self-determined athlete motivation is a difficult characteristic to instill during the off-season, but it must be an integral focus of collegiate coaches. Athletes who are self-determined to commit and provide good effort in the training tasks of the off-season will reap the benefits of improved sport performance, sport satisfaction, and overall well-being. However, it is up to the coach to encourage and develop this motivational orientation in his or her athletes through the satisfaction of the fundamental needs and the structuring of goals that provide athletes with the opportunity to feel efficacious in the behaviors and tasks of the off-season.

Implications for Future Research

Western culture and the culture of sport in general still promote and support a controlling style of leadership in coaching today, and although some level of controlling behavior must be exhibited by a coach to maintain structure and discipline amongst their athletes, future research should focus on what athletes perceive to be the proper combination of autonomy-supportive and controlling coaching styles and how coaches can develop an appropriate combination of each style.

Secondly, it would be appropriate for future research to focus on each of the seven attributes of an autonomy-supportive coaching style that are mentioned within this paper.

Empirical testing of each characteristic has not always been conducted within the field of sport, nor has it been conducted with enough depth to confirm that these seven characteristics are the most critical to establishing an autonomy-supportive leadership style.

Finally, future studies should be conducted that focus on the ability of coaches to learn and/or adapt to a more autonomy-supportive coaching style. This is important because without the ability to learn autonomy-supportive behaviors, coaches will impede their own ability to promote and develop self-determined motivation amongst their athletes during the off-season. Research conducted with such a focus could reveal the most effective methods for teaching coaches to be autonomy-supportive in their leadership style, as well as provide methods for improving coaching style effectiveness amongst those coaches who are already perceived to be autonomy-supportive.

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