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THE ROLE OF INSPIRATION IN INCREASING SITUATIONAL MOTIVATION IN
MALE TEAM ATHLETES

by

Stephen Patrick Gonzalez

(Under the Direction of Jonathan N. Metzler)

ABSTRACT

Motivation and inspiration are often used superficially and synonymously in media coverage of sport. Sportscasters and reporters speculate about athlete motivation cite inspirational locker room speeches from coaches as a motivational source. Research in and out of sport psychology has developed and verified theories to describe mechanisms of motivation change (Deci & Ryan, 1985; Vallerand, 1997), but there is little research on the role of inspiration (Thrash & Elliot; 2003, 2004). The current study aimed to determine if inspiration can be manipulated, and if so, how increased inspiration impacts situational motivation of athletes. A two-way repeated measures ANOVA revealed that inspiration increased for collegiate football players randomly assigned to observe a simulated pep-talk but not for their counterparts assigned to a control group. Situational autonomous motivation did not exhibit a similar response. Multiple regression analysis revealed that change in inspiration was not predictive of change in situational motivation. The results support the contention that inspiration and situational motivation are distinct constructs. Future research in sport should attend to examining consequences of

inspiration change in athletes to clarify the role of inspiration contrasted against motivation in sport.

KEYWORDS: Inspiration, Relative autonomy, Self-determination theory, Coaches, Pep talks

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MALE TEAM ATHLETES

by

STEPHEN P. GONZALEZ

B.S., University of Pittsburgh, 2003

A Thesis Submitted to the Graduate Faculty of Georgia Southern University in Partial
Fulfillment of the Requirements for the Degree

MASTER OF SCIENCE

STATESBORO, GEORGIA

2009

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MALE TEAM ATHLETES

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DEDICATION

This project is dedicated to the two most important women in my life: my fiancé Aimee and my mother Stephanie. Aimee, without your unyielding support, love and your great cooking I do not think I would be where I am today. I love you with all my heart. Mom, your unconditional love and support has gotten me through some of the toughest times in my life. Your strength and hard work encourage my everyday actions and I love and thank you.

ACKNOWLEDGEMENTS

I would first and foremost like to acknowledge Dr. Jon Metzler for all his patience, feedback and hard work as my thesis advisor. Thanks to his help, I am a critical consumer of research and I am a more efficient researcher. His encouragement, selflessness, advice, and humor made this project the best it can be. Dr. Metzler, you are a great professor, mentor and friend and it is with the most sincerity that I say, “Thanks Doc!”

To my committee members, I thank you for your time and energy during this project. Your critiques, suggestions and input challenged me to think deeply about the literature and my writing. Dr. Czech, thank you for your energy and passion for your students. Your constant encouragement helped me buckle down and work through my problems. Dr. Joyner, you are a great mind and I learn something every time that we talk about research. Although I never did get you for a class, your influence reaches far beyond the classroom. Dr. Graf, thank you so much for serving on my committee and providing a fresh mindset towards my project. Your encouragement and smile every morning was awesome. See you on the roads!

I would also like to acknowledge some people behind the scenes. Dr. Jim Rodger from Indiana University of Pennsylvania and family friend: His words to encouragement and support over my life helped me become a better student. To my undergraduate research assistant Holli Finneren: Thank you so much for your help in collecting and entering data, and all the best in graduate school! To our wonderful staff at Georgia Southern University, namely Jody Rushing and Beth Sammons: Both Jody and Beth will always

drop everything to help the graduate students out with printing a poster, scheduling a class, or help with pretty much anything else. You guys make being a graduate student a great experience!

Finally, I need to thank my family. Mom and Dad, your work ethic, love, and support is instilled in me and I thank you for the values you taught me over the years. I know because of you that if I work hard enough I can achieve anything! Chris, your humor and support is greatly appreciated. Luke, thanks for the YouTube videos and technology advice, it really helped me through this project.

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CHAPTER 1

INTRODUCTION

In today's media coverage of sport, the terms motivation and inspiration are often used superficially and synonymously. It is not uncommon for sportscasters and color commentators to speculate about athlete motivation as well as the sources of their motivation using statements such as the "coach is such a great motivator" or that "the crowd motivated this team." Sometimes, sportscasters point toward inspiration as a source of athlete motivation, specifically describing coaches who deliver inspirational locker room speeches to motivate their athletes. This anecdotal evidence points toward a speculated relationship between inspiration and motivation. More specifically, the casual fan may expect that the pep-talk inspires athletes, thus increasing motivation in the moment of competition. Scholarship both in and out of sport psychology has developed and verified theories to describe mechanisms of motivation change; however, little attention has been given to this perceived role of inspiration. Although recent scholarship has focused on inspiration (Thrash & Elliot; 2003, 2004), no research to date has been found which has investigated the role of "inspirational" tactics in sport on enhancing athlete motivation. The current study aims to determine if inspiration can be manipulated as easily as speculated and if so, how increased inspiration impacts situational motivation of athletes.

Motivation Defined

Motivation has been defined as the energization, direction, and regulation of one's behavior over time (Roberts, 2001). Motivation is internally regulated, yet can be

influenced by someone else's behavior or one's environment. The key component of motivation is how one internalizes the outside stimulus. There are numerous theories of human motivation; however, the current study focuses on tenets of self-determination theory (SDT) because the theory recognizes that humans actively engage in their environments toward self-growth and fulfillment of needs, encapsulating several theories of psychology. More specifically, SDT consists of a sub-theory that looks at how one internalizes stimuli and ranks whether or not it is important and fulfilling of one's needs. This sub-theory, called Cognitive Evaluation Theory (CET) posits that stimuli in the environment are recognized, taken in to one's thought process, and then considered into how important it is towards the self (Deci & Ryan, 1985). Although many motivational theories are applicable to the sport setting, SDT addresses external stimuli and the possible impacts on motivation (Roberts, 2001), which is the focus of this study.

Self-determined Motivation

According to SDT, to understand human motivation, scholars must consider innate psychological needs (Deci & Ryan, 1985). Much like plants need water and sunlight to grow, people need relatedness, autonomy, and competence for ongoing psychological growth and well-being. Relatedness refers to the need for people to be connected with other people and feel bonded with others (Deci & Ryan, 2002). Autonomy refers to the needs for people to originate their own behaviors (Deci & Ryan, 1985). Finally, not only do people want to be the source of their own behavior but they desire competence - to interact effectively with their environment insofar as they can produce desired outcomes or prevent undesirable outcomes (Deci, & Ryan, 2002). SDT assumes that all human beings have the capability and the tendency to develop a sense of

self from innate processes (Deci & Ryan, 2002). In developing the self, the three basic needs assist one in becoming fulfilled and intrinsically motivated. According to SDT, when one feels autonomous, related to others, and competent at a task, then the person becomes autonomous in their motivation, and the sense of self becomes cognizant. Intrinsic motivation is the highest form of motivation one can achieve, and it is the most advantageous form of motivation (Deci, 1971).

Research by Vallerand (1997) put perceived autonomous motivation on a continuum with three distinct categories: amotivation, extrinsic motivation, and intrinsic motivation. These categories are then further broken down into specific levels of varying degrees of autonomous motivation. The continuum begins with amotivation (no autonomous motivation, lowest level) and builds towards higher levels of autonomous motivation from to extrinsic and then intrinsic motivation. As the continuum shifts from extrinsic to intrinsic motivation, the more autonomy one has increases.

Amotivation is performing or doing without any motivation, and intention to perform well becomes compromised (Deci & Ryan, 1985). Amotivation is the lowest form of motivation as it is the absence of motivation.

Extrinsic motivation is defined as actions performed to achieve an end state. According to Deci and Ryan (1985), extrinsic motivation can be further classified into four types based on the degree of autonomy individuals have in regulating behavior. The least autonomous form of motivation, *external regulation* is defined as behavior done to achieve an end state such as a trophy or money or to avoid negative ends such as reduced playing time (Vallerand, 2002). *Introjected regulation* involves preliminary internalization of the environment. Rather than behaving to achieve or avoid external

rewards or punishments, respectively, individuals engaged in introjected regulation behave out of “obligation”, compliance, or to avoid internal punishment (i.e., guilt; Vallerand, 2002). *Identified regulation* occurs when one internalizes and finds value in participating in an activity with a sense of choice, thus increasing one’s perceived autonomy (Vallerand, 2002). Finally, *integrated regulation* is the most autonomous form of extrinsic motivation and refers to the fact that one begins to make decisions because one finds value with external demands (Vallerand, 2002). This form of regulation is when people behave because the behavior helps define who they are and the behavior is not differentiated from a sense of self.

Intrinsic motivation is the highest form of autonomous motivation and when one is most self-determined in his or her motivation. When one is intrinsically motivated, one engages in the activity due to inherent aspects of the activity itself. Intrinsic motivation has three categories: *intrinsic motivation to know, to accomplish, and to experience stimulation* (Vallerand, 2002). *Intrinsic motivation to know* is when one participates in an activity to learn and understand new concepts and ideas. *Intrinsic motivation to accomplish* is when one participates in an activity because the person wants to better him or herself or accomplish something. Lastly, *intrinsic motivation to experience stimulation* refers to those who participate in an activity for the thrill and sensation one attains from the activity (Vallerand, 2002).

Vallerand (2001) wrote that the situational level of motivation (see Vallerand, 1997), is central to one’s motivation to engage in activity because it is in the moment of the activity. Psychological research on situational factors and their effects on motivation levels have been shown in several studies (Deci & Ryan, 1987; Whitehead & Corbin,

1991). In addition to the situational level of motivation, Vallerand (2001) also identifies contextual and global motivation levels in the hierarchical model. Situational motivation is the motivation one has in the actual moment of an activity. Contextual motivation is the motivation one has in the context of that activity. For example, one's motivation towards a specific activity such as a sport or a subject in school is contextual motivation (Vallerand, 2001). The global level in the hierarchical model refers to one's overall motivation, almost trait like motivation towards many aspects of life (Vallerand, 2001).

This continuum has important implications for sport because athletes are told what to do by coaches and trainers, which can take away autonomy from decision-making and behavior. Examining how an athlete perceives his or her autonomy is important in understanding how intrinsically motivated one is as well as one's satisfaction level with sport. Differentiating motivation by levels of autonomy affords a more precise understanding of how motivation leads to beneficial or harmful consequences. Individuals who are more autonomous will report higher levels of self-determined motivation, or perceived autonomy support than those low in autonomous motivation. Given that autonomy is an innate need for human beings, satisfaction of this need is theorized to lead to a host of beneficial outcomes including overall psychological well-being.

Benefits of Self-Determined Forms of Motivation

Ryan and Deci (2000a) specifically cite that those who are self-determined have “more interest, excitement, and confidence, which in turn is manifest both as enhanced performance, persistence, and creativity...” (p. 69) than their counterparts. When one is self-determined, one finds value in an activity that develops from the self (Ryan & Deci,

2000). Finding value in an activity or a set of behaviors becomes advantageous because a person involves him or herself on a deeper level, thus improved performance results because an activity is inherently important to the self-determined individual. Other benefits to a more self-determined individual include: interest (Prenzel, Kramer & Drechsel, 1998), persistence (Deci & Ryan, 2000b), resilience to failure (Sarver, 2000), concentration (Deci, Eghrari, Patrick, & Leone, 1994), and flow (Csikszentmihalyi, 1990). Athletes that have the above characteristics, in addition to improved performance, makes an autonomously motivated athlete highly desirable.

Theory of Motivation Change

According to self-determination theory, to enhance motivation in athletes, coaches can satisfy athletes' innate psychological needs. For example, team building activities provide a sense of community within athletes affording a sense of relatedness. Coaches' use of affirmations and success can enhance athletes' perceived competence in sport. Coaches can also provide opportunities for athletes to be involved in decision making which allows them to feel more autonomous. Increase need satisfaction (autonomy, relatedness, competence) is theorized to increase self-determined motivation.

The self becomes involved because of the needs for autonomy, competence, and relatedness. Extensive research on SDT (see Deci & Ryan, 2002) show that facilitating autonomy, competence, and relatedness will increase self-determined motivation. When these needs are fulfilled, the benefits are substantial. Deci and Ryan (2000a) write that human needs:

“...specify the necessary conditions for psychological health or well-being and their satisfaction is thus hypothesized to be associated with the most effective

functioning. A further claim is that each of these three needs plays a necessary part in optimal development...” (p. 229).

When thinking in terms of the psychological aspects of sport, if need satisfaction can create “optimal development” and “most effective functioning,” then it would be advantageous to explore how to keep individuals self-determined in their motivation. It can thus be concluded that self-determined motivation is advantageous to achieve, therefore understanding how to increase this form of motivation in addition to need satisfaction is important in potentially enhancing one’s performance or experience.

SDT researchers studied motivation changes in business settings (Baard; 1994, 2002), in education (Eccles & Midgely, 1989), and in sport (Whitehead & Corbin, 1991; Orlick & Mosher 1978; McAuley & Tammen, 1989) among many other domains. In the study done by Eccles and Midgely (1989), students benefited from their teachers who supported their autonomy by self-reporting a like of school and increased participation. Baard (2002), in his book chapter on SDT in organizations cited need satisfaction for an increase in giving levels and growth at churches. In sport and exercise, Whitehead and Corbin (1991) found that intrinsic motivation increased with positive feedback, which produced enhanced competence and autonomy while negative feedback decreased intrinsic motivation on a fitness test with children.

Clearly, coaches can draw from this scholarship to possibly enhance athlete motivation; yet, speculation regarding the role of inspiration in enhancing motivation continues to thrive in sport. Recent scholarship suggested that inspiration (Thrash & Elliot, 2003; 2004), a phenomenon that does not originate in the individual, might play an important role in facilitating autonomy and self-determined motivation because

inspiration is not initiated directly by an individual, thus a feeling of autonomy to act or feel a certain way. Given the anecdotal adherence of coaches and media to inspiration as a method for enhancing motivation and this recent line of thought, it is important for sport psychology research to examine the role of inspiration in changing athlete motivation.

Inspiration Conceptualized

Hart (1998) explored the experience and meaning of inspiration of people in a qualitative investigation. Four general phenomenological characteristics emerged from Hart's research. Inspired individuals described a *connection* to a concept (i.e., future self, ideas, etc), being *opened* to something beyond the participant's control, experiencing *clarity* or a "heightened sense of awareness," and experiencing a substantial shift in physical and emotional *energy* (Hart, 1998). It is important to note that participants themselves differentiated inspiration from motivation, stating that they were not the same experience (Hart, 1998). These findings provided initial support for differentiating inspiration from motivation and clarifying it as a unique construct in the literature.

Recent scholarship in mainstream psychology has advanced the study of inspiration (Hart, 1998; Thrash & Elliot, 2003; Thrash and Elliot, 2004); however, this psychological construct has yet to be explored in sport psychology. There are various definitions of inspiration across different fields of study (i.e. religion), but Thrash and Elliot (2003) conceptualize inspiration as an experience that 1) implies motivation, 2) is something that is evoked and not initiated directly, and 3) involves transcendence of one's usual abilities. Inspiration occurs from an outside source and then changes and impacts an individual's motivational processes. Inspiration differs from motivation in that

motivation is the regulation, direction, and energy behind one's behavior (Roberts, 2001); whereas inspiration is an evoked sense of energy from a source that implies motivation.

Trait inspiration was the first focus of Thrash and Elliot's (2003) work, which involved individual differences about the ability to experience inspiration, but studying the state of inspiration gets into the actual experience of inspiration and what one feels in the process. Trait inspiration relates to several personality traits including openness, absorption, positive affect, work mastery, creativity and optimism (Thrash & Elliot, 2003). Thrash and Elliot also related inspiration to intrinsic motivation and extrinsic motivation, each having positive correlations with their construct of inspiration. In summary, inspiration is related to appetitive motivational states especially activated positive affect (PA), which is inspiration's strongest known correlate.

State inspiration was the next focal point of Thrash and Elliot's (2004) work on inspiration. Within the state experience of inspiration, two component processes were identified: being "inspired by" and being "inspired to." Thrash and Elliot (2004) differentiated inspiration and its "by" and "to" processes. Thrash and Elliot's Inspiration Scale (IS; 2003) measured the "inspired to" process with the third item's intensity factor (item 3i) on the IS (Thrash & Elliot, 2004). The item reads "I am inspired to do something," which embodies the notion that one is moved to act on the feeling of motivation (Thrash & Elliot, 2004). The "inspired by" mechanism is measured with the second item on the IS's intensity factor (item 2i). The item reads "Something I encounter inspires me," which measures whether or not one was inspired by a stimulus (Thrash & Elliot, 2004). As it is written, the "inspired by" component recognizes the presence of inspiration and not an action tendency to go out and actually do something. When tested

in comparison to “inspired by,” “inspired to” was positively related to responsibility (i.e. being the origin of the feeling) and approach motivation (Thrash & Elliot, 2004).

Inspiration is an external stimulus that could possibly play an important role in influencing one’s motivation, or in facilitating self-determined motivation and autonomy (Thrash & Elliot, 2004). Further, “inspired by” and “inspired to” had different antecedent processes, with “inspired by” having more transcendence and denial of responsibility (e.g. inspiration from a beautiful image) and with “inspired to,” there is implied motivation evoked from an external source that spurs one to direct his or her behavior towards a certain accomplishment or goal, such as seeing a role model accomplish something or finding value in one’s words or actions (Thrash & Elliot, 2004). In sport, researchers assume coaches or leaders can inspire athletes, or the “inspired by” mechanism. Whether or not they can be inspired to do something is an important concept, hence the potential influence of inspiration on situational motivation.

Antecedents of Inspiration

The antecedents of inspiration, on a trait level, are generally categorized as “appetitive motivational” states (Thrash & Elliot, 2003). Specifically, in a time-lagged study, Thrash and Elliot (2003) found that openness to experience correlated and also facilitated inspiration as an antecedent. Work mastery was another antecedent suggesting that inspiration favors a “prepared mind” (Thrash & Elliot, 2004). In sum, openness and work mastery show that inspired individuals are not passive but mentally apt towards becoming inspired (Thrash & Elliot 2003). On a state level, the antecedents for inspiration were openness to aesthetics (i.e. openness to the environment), absorption (i.e. intense attention and cognitive re-thinking), and self-forgetfulness (i.e. being able to

focus on one thing; Thrash & Elliot, 2004). These antecedents favor sport and exercise settings because athletes are open to the experience of competing and the preparation to compete (i.e. work mastery) and therefore are more apt to the possibility of inspiration. This prepared state to compete allows for stimuli in the environment to possibly play a role how one approaches competition. If an athlete is closed off to playing, lacking mental preparation, or does not find value in a stimulus then it is plausible that inspiration will not impact one's situational motivation.

Consequences of Inspiration

In the same time-lagged study (Thrash & Elliot, 2003), consequences of inspiration at the trait level were also analyzed. Work mastery was also a consequence along with absorption indicating that trait inspiration has a lasting effect on one's motivation (Thrash & Elliot, 2003). Although inspiration was measured as a trait, it can be speculated that trait inspiration may increase from increased work mastery. Self-enhancement also emerged given that measures of perceived competence, self-esteem, and optimism resulted from inspiration (Thrash & Elliot, 2003). At the state level, the consequences of inspiration are transmission (i.e. acting to do something) and elevated levels of transcendence (Thrash & Elliot, 2004). The most important consequence of trait inspiration is self-determination, which emerged as a result of inspiration. The emergence of self-determination is important because it enables a questioning of whether or not an inspirational stimulus can increase one's self-determined motivation as a result, something that inspiration may actually facilitate.

Differentiating Inspiration and Arousal

Given that inspiration is conceptualized as a construct that is evoked and provides energy (Thrash & Elliot, 2003), it may be confused with a phenomenon with a long history in sport psychology scholarship, namely arousal. Gould, Greenleaf, and Krane (2002) define arousal as the level of energy one has as the result of a stimulus, and exists on a continuum from sleep (no arousal) to high intense activity. Arousal provides energy to athletes at particular moments, and past research has shown arousal to be both detrimental and beneficial to performance depending on how one regulates arousal (Hanin, 1989, 1997; Sonstroem, 1984; Swain, & Jones 1992).

Based on this understanding, inspiration may be differentiated from arousal in at least three distinct ways. First, in contrast to inspiration, arousal provides no direction for the energy experienced. Direction of energy is an integral part of motivation, according to Robert's (2001) definition. Recent scholarship has clearly conceptualized a directional aspect to inspiration as seen in the "inspired to" component (Thrash & Elliot, 2004) whereas how arousal might direct behavior is unclear in the literature. A second difference between these constructs is that arousal is primarily measured from physiological responses such as heart rate, respiratory responses, and skin conductance (Gould, Greenleaf, & Krane, 2002). In contrast, inspiration has no known physiological measurement associated with it to date. Lastly, transcendence is included as a key component in Thrash and Elliot's (2003) conceptualization of inspiration. Although arousal has been associated with temporary performance enhancement such as strength increases (Gould, Weinberg, & Jackson, 1980; Tynes & McFatter, 1987; Whelan, Epkins, & Meyers, 1990), this consequence cannot be equated to transcendence. Transcendence

differs from enhancement in that transcendence is a broader and more existential experience of improving oneself than enhancement alone (see Thrash & Elliot, 2003)

The Role of Inspiration in Self-Determined Motivation

Of particular interest, is whether or not inspiration can increase situational motivation. A powerful speech, quote, or action clip that tends to energize the intended audience often characterizes inspiration in sport. Because of the interest of the authors in the “pep-talk” or “inspirational speeches” that coaches often give to teams before and during games, it is appropriate that the situational motivation levels are examined due to the unknown length that inspiration may or may not have on motivation. Also, since “pep-talks” are usually different each time that they are administered to a group of people, research shows that presenting a stimulus more than once in increasing situational motivation does not have a lasting effect (Loveland & Olley, 1979). To date, no one has studied whether inspiration actually increases autonomous motivation. Correlations have been made (Thrash & Elliot, 2003; Thrash & Elliot 2004) and implied motivational changes have been made (Lockwood & Kunda, 1999; Burleson, Leach, & Harrington, 2005), but the true test of a variable is its manipulation.

Inspiration, according to Thrash and Elliot’s conceptualization, is evoked and implies motivation. An inspirational stimulus in turn evokes a response and provides energy towards one’s current goal. Being “inspired to” do something empowers an individual giving them a feeling of control over one’s actions, which is the essence of autonomy. Individuals who are “inspired to” may thus experience satisfaction of the need for autonomy (Deci & Ryan, 1985). Therefore, it is possible that increases in perceived inspiration could be associated with increases in situational autonomous motivation.

Indeed, several studies have documented increased situational motivation. Among the causes of enhanced autonomous motivation are factual performance information, and outperforming others, which may reflect increases in perceived competence. However, positive verbal feedback (i.e., praise, affirmation) also enhances autonomous motivation possibly due to increased perceived relatedness and autonomy (Vallerand, 2001). Much like performance feedback, given an inspirational stimulus, one may perceive the stimulus as empowering and thus increase one's autonomy in the moment, consequently increasing situational motivation.

Purpose

The purpose of the current study is to examine the effect of inspiration on situational autonomous motivation. Specifically, this study will assess whether a stereotypical “motivational” stimulus in sport increases inspiration. It is expected that a Hollywood movie scene of an actor playing a coaching giving a “pep talk” will increase inspiration compared to a control group who does not see this video. Moreover, it is expected that changes in inspiration will be positively associated with changes in situational motivation. This effect is hypothesized to occur even after controlling for contextual motivation and perceived relatedness.

CHAPTER 2

METHODS

Pilot Study

In order to see if the stimulus chosen could actually manipulate inspiration, a pilot study was conducted. Seven (4 female, 3 male) team sport athletes from a large Southeastern university participated in the study. The average age of the athletes was 18 for the females and 19 for the males. The participants were pre-tested on inspiration using the Inspiration Scale (Thrash & Elliot, 2003), then watched the “Inches Speech” given in the movie *Any Given Sunday* (Warner Bros, 1999), and then were post-tested on inspiration. The female athletes each decreased in inspiration, citing that the stimulus was all male athletes and football players, which drew no interest to them. The males individually all increased in inspiration increasing from averages of 5 to averages of 7 on the measure. Therefore, scenes from *Any Given Sunday* will be used in this study, specifically “The Inches Speech” as the inspirational stimulus since a change in inspiration was seen in the pilot study.

Participants

The participants in this study were 151 male collegiate football players from two universities and colleges at the NCAA division I level in the Southeastern United States. Participants in this study had a mean age of 19.61 years ($SD = 1.24$) and were comprised of freshmen (46.6%), sophomores (25.7%), juniors (17.6%), and senior (10.1%). Participants were predominantly African American (64.9%) but also included White (31.1%), Native American/Alaskan (0.7%), as well as other races (3.4%).

Instrumentation

Inspiration and inspiration change. Participants completed a six-item adaptation of the Inspiration Scale (IS; Thrash & Elliot, 2003), which affords scores for inspiration intensity. Thrash and Elliot measure “inspired to” with a single item, which historically does not afford reliable scores, thus items were added to increase reliability. Participants were asked to respond to items based on how they feel “right now” on a scale ranging from *not at all* (1) to *very strongly* (7). Thrash and Elliot (2004) altered the wording of the items in the IS so as to encourage reflection, hence our measure changed so as to encourage participants to think about right now. In addition to the measures, the *Oxford English Dictionary* definition of inspiration was given as in Thrash and Elliot’s studies: “Inspiration is defined as a breathing in or infusion of some idea, purpose, etc. into the mind; the suggestion, awakening, or creation of some feeling or impulse of the exalted kind” (2003, 2004). The average of the six measures was used to operationalize inspiration. IS scores have demonstrated moderate relationships with theoretically convergent constructs (see Thrash & Elliot, 2003), thus providing evidence for external validity of scores. Scores on this six-item scale were internally consistent both prior to ($\alpha = .90$) and after ($\alpha = .96$) stimulus. *Inspiration change* was calculated by subtracting pretest inspiration from posttest inspiration.

Situational motivation and situational motivation change. The Situational Motivation Scale (SIMS) provided scores for motivation in the moment (Guay, Vallerand, & Blanchard, 2000). The scale consisted of 16 items measured using a seven point Likert scale ranging from “corresponds not at all” to “corresponds exactly.” The

SIMS has four subscales: intrinsic motivation, identified regulation, external regulation, and amotivation. Cronbach's alpha ranged from .61 and .79 for the pretest subscales and .66-.81 for the posttest subscales. A summary score called the Relative Autonomy Index (RAI; see Pelletier & Vallerand, 2001) can be calculated to operationalize autonomous motivation. RAI was calculated using the following formula: $\text{Intrinsic} + \text{Identified} - \text{Introjected} - 2 \times \text{External}$ (Fortier, Vallerand, & Guay, 1995; Vallerand & Bissonnette, 1992). Situational motivation change was operationalized by subtracting pretest from posttest RAI scores.

Contextual motivation. The 28-item Sport Motivation Scale (SMS; Pelletier et al., 1995) provided scores for seven forms of motivation to engage in the sport context including three forms of intrinsic motivation (to know, to accomplish, and to experience stimulation), three forms of extrinsic motivation (identified, introjected, and external regulation), and amotivation. In the current study, Cronbach's alpha for subscales ranged from .65 to .79. Contextual RAI was used to operationalize contextual autonomous motivation. Unlike the SIMS, the SMS provides scores for three forms of intrinsic motivation. Consequently, the average of these three subscale scores served as a measure of contextual intrinsic motivation when computing contextual RAI.

Perceived relatedness. Richer and Vallerand's (1998) Need for Relatedness Scale was used to measure feelings of relatedness. The scale comprises 10 items, including 5 items for each of two sub-scales; acceptance and intimacy. Participants responded on a 7-point Likert scale for each item ranging from "does not correspond at all" to "corresponds exactly." Hollembeak and Amorose (2005) adapted the scale for sport without compromising reliability. Cronbach's alpha was .86 for acceptance and .88 for intimacy

on the pretest measures and .93 for acceptance and .94 for intimacy. Change in perceived relatedness was operationalized by subtracting pretest from posttest relatedness.

Procedure

Participants were randomly assigned to either an experimental group ($n = 74$) or a control group ($n = 77$). All participants completed measures of contextual motivation (SMS), inspiration (IS), relatedness (PR), and situational motivation (SIMS). Then athletes were exposed to either the inspirational stimulus (experimental group) or a benign stimulus (control group). The inspirational stimulus was a video clip taken from the movie *Any Given Sunday* (Warner Bros, 1999), a movie about professional football. In the movie there is a scene entitled the “Inches Speech” in which Al Pacino plays a coach giving a half-time speech to his players. The benign stimulus was taken from the same movie, except Al Pacino is giving instruction and coaching the athletes. The clips were similar in length and contain the same actor so as to achieve reliability across the stimuli. All participants were administered the stimulus at the same time along with the measures in their respective group assignment, either control or experimental. After watching the clips, participants completed measures of inspiration (IS), relatedness (PR) and situational motivation (SIMS).

Data Analysis

Data were analyzed using SPSS version 16.0. Two-way repeated measures ANOVAs were conducted to assess the differences in change overtime in inspiration and situational motivation (RAI) between individuals in the control and experimental group. To assess the unique contribution of inspiration change on situational motivation change, a hierarchical regression was performed. Contextual motivation and perceived relatedness

change were entered simultaneously in Step 1 with inspiration change and group membership (control or experimental) added in Step 2. Significant change in R^2 from Step 1 to Step 2 was assessed to determine if situational motivation change may be associated with inspiration change regardless of levels of contextual motivation or perceived relatedness change. A priori alpha was set at .05.

CHAPTER 3

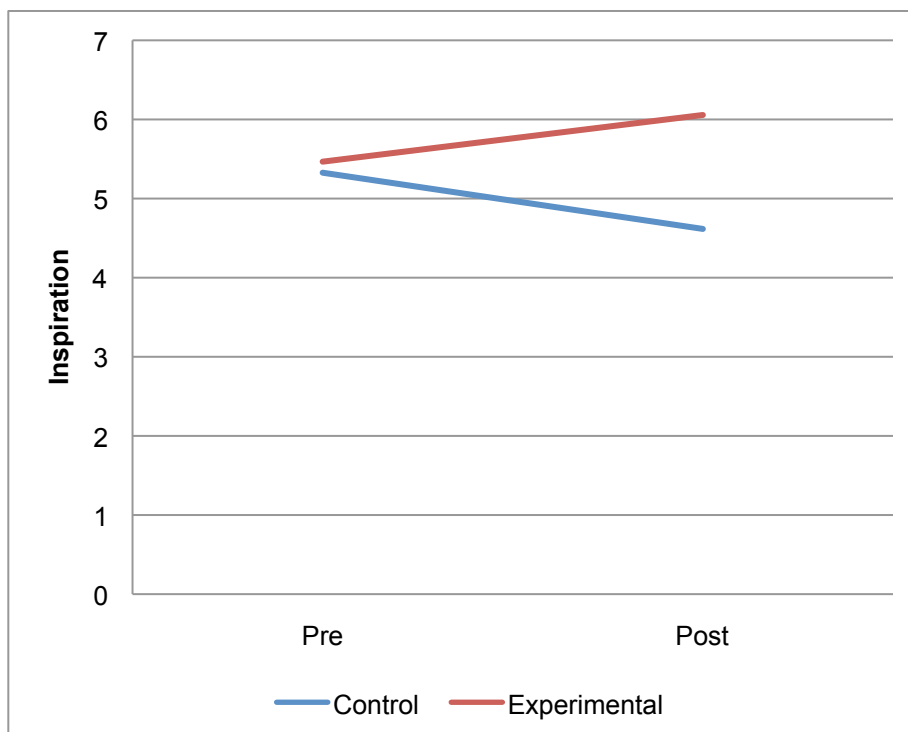
RESULTS

Descriptive statistics for the outcome and independent variables can be found in Table 1.

Group Differences in Inspiration and Situational Motivation Change

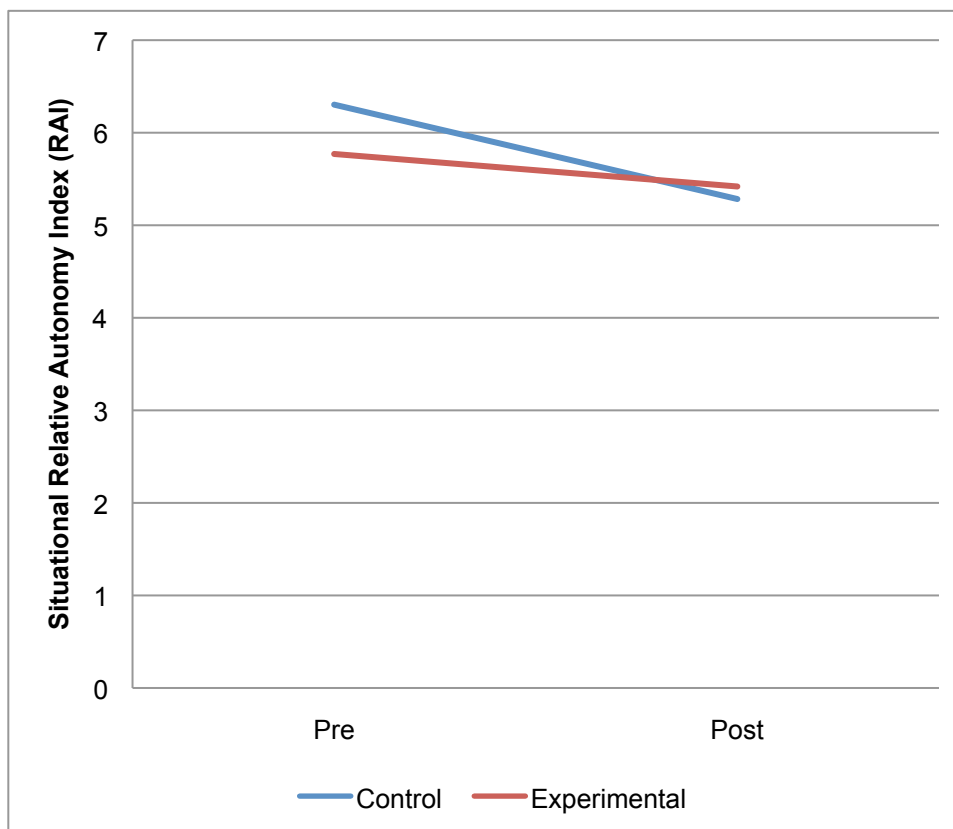
A two-way ANOVA with repeated measures was conducted to assess the differences in inspiration change between individuals who viewed a “pep talk” (i.e., experimental group) and individuals who did not (i.e., control group). Inspiration change between the experimental and control groups from pre to post test was significantly different [$F(1,74) = 31.71, p = .000$]. As seen in Figure 1, the experimental group reported increased inspiration from pre to post test [$t(73) = 4.42, p = .00003, d = .42$], while the control group decreased in inspiration [$t(75) = -3.92, p = .0002, d = -.43$].

Figure 1: Change in inspiration by condition



A secondary two-way ANOVA with repeated measures revealed that there was not a significant interaction between group (experimental and control) and occasion of measurement (pre and post) for RAI change [$F(1,74) = 1.81, p = .18, f = .11$]. This analysis did reveal a main effect for time [$F(1,74) = 7.60, p = .007, f = .23$]. As displayed in Figure 2, both groups decreased in RAI over time.

Figure 2: Change in situational motivation by condition



Predicting Situational Motivation Change

A hierarchical multiple regression analysis was conducted to assess predictors of situational motivation change. In step 1 of the analysis, none of the variables including contextual motivation, perceived acceptance change, and perceived intimacy change, contributed to the variance in situational motivation change ($\Delta R^2 = .01, p = .69$). In step

2, neither inspiration change nor group membership contributed additional variance to situational motivation change ($\Delta R^2 = .007, p = .79$). See Table 2 for a regression summary.

CHAPTER 4

DISCUSSION

Inspiration is a construct of value for various domains; however, sport may serve as a particularly salient domain for understanding this construct. The current study aimed to advance recent scholarship (Thrash & Elliot, 2003; 2004) in three ways. First, the study represents the first attempt to experimentally manipulate inspiration. Second, if athletes did report changes in inspiration, we were interested in examining the relationship between inspiration change and change in situational motivation. Lastly, to our knowledge, this is the first study conducted on inspiration specifically with a sample of competitive athletes.

As expected, collegiate football players who experienced a simulated halftime speech reported significant increases in inspiration. What makes a stimulus inspiring, according to Thrash and Elliot (2004) is the “perceived intrinsic value of a stimulus” (p. 970), rather than reward value. The existing literature established known antecedents of inspiration on the state level (Thrash & Elliot, 2004), and the sport setting was theorized to be favorable when considering the antecedents of inspiration because athletes are open to competing and the preparation to compete (i.e. work mastery) and therefore are more apt to the possibility of inspiration. In this study participants were in their first team meetings before spring football training and were getting ready for the fall season. The athletes were in a prepared state because they were coming off their rest period from the end of last season and are beginning to be in a prepared state to compete. Being away from the sport and getting ready to play again set the stage for a stimulus in the environment, in this case an inspirational speech from a movie, to have an effect to

impact the participants' approach to their sport if they perceived the stimulus to be inspiring and consequently moving them to increase in motivation to play. Based on these results, we can conclude that participants in this study found value in the "pep talk" as reflected by their increase in inspiration.

Rather surprisingly, participants in this study reported decreased situational motivation, which suggests that perceived autonomy, relatedness or competence declined for all participants regardless of the stimulus they received. Since the coaches in this study encouraged the athletes to participate, they may have felt less autonomous over the experimental period, but this can only be speculated due to the fact that perceived autonomy was not measured in the study. The decline in motivation could be due to the fact that the psychological needs were not facilitated or integrated due to the context of the stimulus. Another possible reason for the decline in RAI in both groups could be due to the culture of football, because the players involved in college football have plenty of responsibilities and commitments given to them by the coaches. Although the participants were told they did not have to participate in this study, the players might have felt obligated to participate because the coaches put them in the room after practice. Given that the participants potentially felt obligated, autonomy was taken away and thus a decline was seen across participants.

Contrary to expectations, changes in inspiration were not associated with changes in situational motivation. Although a simulated "pep-talk" did increase athlete inspiration, these increases may not facilitate increases in perceived autonomy as hypothesized. Self-determination theory contends that situational motivation will increase if individuals feel more connected, autonomous or competent (Deci & Ryan, 1985). It

was speculated that previous motivational theory (i.e. SDT) could potentially be a result of being inspired on the basis of cognitive evaluation theory (CET, Deci & Ryan, 1980), which is a sub-theory of SDT that postulates that the self perceives certain aspects of the environment as fulfilling the basic needs. A “pep-talk” may not be perceived as fulfilling the needs, as evaluated by the self. Ryan (1995) speculated that the process that facilitates the psychological needs of SDT is dynamic and is dependent upon the social context. The actor in the movie simulated a scenario in which a “pep-talk” was given to a team at halftime, but the context of the speech could lack the facilitation of competence and autonomy. Past research provided evidence for speculation that an inspirational stimulus may empower someone and thus increase one’s autonomy in the moment, consequently increasing situational motivation. The conceptualization of inspiration implies motivation (Thrash & Elliot, 2003), hence the speculation of empowerment. The self, in accordance with CET may not perceive the stimulus as empowering, thus exposing individual differences as a possible reason for the decline in motivation. Given that inspiration increased for the experimental group yet situational autonomous motivation decreased for all participants and was unrelated to inspiration change, we can conclude that the constructs are divergent. Although previous studies have documented an association between the two constructs, the current results suggest *change* in one is independent of *change* in the other. Athletes can be inspired without increasing situational autonomous motivation.

Future Research

This study was delimited to male athletes, specifically football players who were team sport athletes. Future research needs to examine females in sport and whether or not

they are inspired by coaches' speeches. Research also needs to look into other sports, both team and individual sports to better understand inspiration and what inspiration translates into across genders and different sports so that the implications of being inspired in sport can be further known. There could be different consequences of inspiration in different populations, and studying different genders and sports could expose those differences. Using actual coaches in a study with their teams is another area of potential research and then testing the outcome of an inspirational speech in a performance measure in a practice or a scrimmage or even on a simple physical test (i.e. bench press reps) to see if inspiration can actually lead to performance gains. Too often sportscasters and commentators often attribute inspiration to outstanding performances, similar with the component of transcendence from inspiration's conceptualization (Thrash & Elliot, 2003). Utilizing some performance measure to measure such an effect could add more value to the use of inspiration in sport to influence the performance of athletes. Future research should also take into account the role of coaches and the participation in a research study as alluded to earlier, as autonomy was potentially affected. Having participants participate outside of the coach's influence may achieve different results.

The results of this study refute that a coach motivates athletes with a "pep talk," but rather, the coach can inspire them. What inspiration leads to or translates to is unknown at this point from an experimental standpoint. Maybe these differences are specific to individuals. Another area for future research is examining the individual differences amongst people and its effect on inspiration and motivation. Thrash and Elliot (2003) have identified different personality traits correlated with inspiration, and

understanding individual differences can help further the understanding of inspiration. Inspiration has also been correlated with absorption, creativity, and optimism (Thrash & Elliot, 2003), which are desirable for athletes to have. Research needs to investigate whether or not inspiration leads to these correlates. If inspiration can increase an athlete's focus (i.e. absorption) or influence an athlete to be creative during a play then inspiration maybe facilitative towards better performance. Social-contextual influences (see Ryan 1995) may also increase inspiration and effect motivation as social-contextual influences are well documented as helping facilitate autonomy, relatedness, and competence. Future research should also take into account the antecedents from Thrash and Elliot's work (2003) and test whether or not on an experimental basis that these antecedents influence someone to be inspired more.

Conclusions

In conclusion, the results found that the “pep-talk” could inspire but we must be cautious in stating that it serves to motivate. There are many potential possibilities that increased inspiration may lead to desirable outcomes, but more research is necessary because motivation enhancement is not one of these outcomes based on the current study. Coaches want to know how to impact their athletes to develop autonomy because these athletes will ultimately have a better experience and be more likely to adhere to tough and demanding training programs. All too often coaches are over involved in their management of athletes, and the inspirational speech or “pep-talk” might be over done to a point where it lacks the ability to move the athletes to work harder or compete. The area of inspiration, both in and out of the sport context, is a young and unknown area that

warrants future research because of the draw of society to attribute inspiration to many positive performance gains and emotions in one's life.

TABLES

Table 1

Summary of Descriptive Statistics for the Outcome and Independent Variables (N=151)

Variable	Control						Experimental					
	<i>M</i>	<u>Pre</u> <i>SD</i>	Range	<i>M</i>	<u>Post</u> <i>SD</i>	Range	<i>M</i>	<u>Pre</u> <i>SD</i>	Range	<i>M</i>	<u>Post</u> <i>SD</i>	Range
Situational motivation												
Intrinsic motivation	5.81	0.96	3-7	5.64	1.17	2.25-7	5.78	1.08	1-7	5.85	1.06	2.50 -7
Identified regulation	5.78	1.05	2-7	5.65	1.09	2.75-7	5.85	1.26	1.25-7	5.89	0.98	3-7
External regulation	2.64	1.54	1-7	3.02	1.85	1-7.25	2.93	1.39	1-7	3.16	1.61	1-7
Amotivation	2.06	1.26	1-6.5	2.78	1.71	1-6	2.03	1.36	1-7	1.96	1.25	1-5.5
Inspiration	5.33	1.71	1-7	4.61	1.83	1-7	5.55	1.47	1-7	6.06	1.92	1-7
Perceived Relatedness												
Acceptance	4.69	1.32	2.2-7	4.81	1.54	1-7	5.09	1.23	2-7	5.42	1.40	1.8-7
Intimacy	4.87	1.23	1.4-7	4.81	1.57	1-7	5.05	1.42	1-7	5.32	1.56	1.2-7
Contextual motivation												
Intrinsic-Stimulation	5.28	1.26	2-7				4.77	1.57	1-7			
Intrinsic-Accomplish	5.35	1.17	2.5-7				5.06	1.42	1-7			
Intrinsic-Know	4.69	1.39	1.5-7				4.77	1.57	1-7			
Extrinsic-Identified reg	4.53	1.23	2-6				4.73	1.33	1-7			
Extrinsic-Introjected	3.79	1.42	1-7				4.01	1.52	1-7			
Extrinsic-External reg	4.41	1.23	1-6.75				4.62	1.49	1-7			
Relative Autonomy Index												
Situational Motivation	6.31	3.78	-9-12	5.28	4.59	-9-12	5.77	3.23	-4.5-12	5.42	3.53	-3.5-12
Contextual Motivation	14.70	3.30	5.58-21.67				15.05	3.91	3-21.92			

Table 2

Summary of Hierarchical Regression Analysis for Variables Predicting Situational Motivation Change (N = 151)

<i>Variable</i>	<i>B</i>	<i>SE B</i>	β
Step 1			
Contextual Motivation	.06	.07	.08
PR Acceptance	-.39	.45	-.10
PR Intimacy	.26	.43	.07
Step 2			
Inspiration Change	.06	.18	.03
Group	.38	.56	.06

Note: $\Delta R^2 = .01$, for step 1; $\Delta R^2 = .007$ for Step 2.

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Appendix A
RESEARCH HYPOTHESES

Research Hypotheses include:

It is predicted that after controlling for contextual motivation:

- I. Participants will increase in inspiration when exposed to an inspirational stimulus.
- II. When exposed to a neutral stimulus, participants will see no change in inspiration
- III. Participants in the experimental group will increase in situational motivation as a result of being inspired.
- IV. Participants in the control group will see no change in situational motivation as a result of not being inspired.

Purpose

The purpose of the current study is to examine the effect of inspiration on situational autonomous motivation. Specifically, this study will assess whether a stereotypical “motivational” stimulus in sport increases inspiration. It is expected that a Hollywood movie scene of an actor playing a coaching giving a “pep talk” will increase inspiration compared to a control group who does not see this video. Moreover, it is expected that changes in inspiration will be positively associated with changes in situational motivation. This effect is hypothesized to occur even after controlling for contextual motivation and perceived relatedness.

Delimitations

1. Participants consisted of NCAA Division I athletes from the Southeastern United States.
2. All participants were in direct contact with the experimenter.

3. All participants took the surveys together in a classroom and watching the video clip together.

Limitations

1. All participants were males ages 18-24.
2. Some individuals may not answer the surveys honestly.
3. The inspirational video clip was sport and gender specific which may affect the results by reducing the validity of responses.
4. Data collection was done at the permission of the head coaches and the head coaches may have taken away autonomy from the players.

Assumptions

1. Participants will answer the questions openly and honestly.
2. Participants will answer each item on the questionnaires.
3. Participants will understand what inspiration is as a construct.
4. Participants will feel inspired despite a different sport seen on the video clip.
5. Participants will not be distracted by fellow participants while completing the study.
6. The coach giving the speech is a famous actor who will inspire the participants.

Definitions

1. Inspiration- implies motivation, is evoked rather than initiated directly, and involves transcendences of one's capabilities (Thrash & Elliot, 2003).
2. Motivation- the energization, direction, and regulation of one's behavior over time (Roberts, 2001).

3. Situational Motivation- motivation one has during the moment of actually participating in the activity (Vallerand, 2001).
4. Contextual Motivation- motivation one has towards a specific activity or area in one's life such as school or sport (Vallerand, 2001).
5. Global Motivation- motivation that one has towards life in general; one's overall motivational disposition (Vallerand, 2001).
6. Self-Determination Theory (SDT)- a theory of human motivation that focuses on the extent that human behaviors and choices are volitional and the extent that people chose their actions at a high level of self-evaluation. What emerges is a sense of choice one had in decision making. Three basic human needs must be met in order to become self-determined: autonomy, relatedness, and competence. (Deci & Ryan, 1985).
7. Intrinsic Motivation- behavior that is done for doing the activity itself as well as the satisfaction and pleasure one gets from doing the activity (Vallerand, 2001).
8. Extrinsic Motivation- behavior done to gain or obtain certain outcomes and rewards that comes from outside of the actual activity (Vallerand, 2001).
9. Amotivation- lack of the presence of motivation (Vallerand, 2001).
10. Cognitive Evaluation Theory (CET)- is a sub-theory of SDT that poses that people make cognitive choices in order to fulfill the three basic needs so as to develop a sense of self (Deci & Ryan, 1980).

Appendix B

ANNOTATED BIBLIOGRAPHY

Baard, P. P. (1994). A motivational basis for consulting with not-for-profit organizations: A study of church growth and participation. *Consulting Psychological Journal*, 46, 19-31.

Citing fundraising issues and concerns about congregation growth, Beard studied churches and the whether or not intrinsic need satisfaction can improve church attendance and fundraising. Beard found that satisfying the congregation's needs for competence, autonomy, and relatedness were related to how much or how often members gave to the church, attended ceremonies, and how much church membership grew overall. This study shows that satisfying the three basic needs in SDT can change motivation and translate into performance (i.e. increasing church membership, raising more money, etc.). Beard's work has implications to study SDT and performance changes in other fields and domains. Beard also includes this study in his book chapter in Deci and Ryan's SDT research handbook (2002).

Baard, P. P. (2002). Intrinsic need satisfaction in organizations: A motivational basis of success in for-profit and not-for-profit settings. In E. L. Deci & R. M. Ryan (Eds.). *Handbook of Self-Determination Research* (pp. 255-275). Rochester, New York: University of Rochester Press.

Self Determination Theory applied in the business setting, both for profit and nonprofit was the topic of Beard's book chapter in Deci and Ryan's handbook on SDT research. Beard's research shows a significant change in motivation in employees in

different businesses when an environment fostered by management fulfilled their needs for competence, autonomy, and relatedness. Baard found that needs satisfaction was a good predictor of adjustment and performance. Research showing a significant change in motivation adds importance to SDT because it shows that having a positive change in motivation levels is advantageous and leads to better performance or “success” as Baard states in his chapter title. Baard also includes the actions and behaviors that managers did to foster need satisfaction of their employees.

Burleson, K., Leach, C. W., & Harrington, D. M. (2005). Upward social comparison and self-concept: Inspiration and inferiority among art students in an advanced programme. *British Journal of Social Psychology, 44*, 109-123.

Burleson, Leach, and Harrington did a study with art students at a summer camp to see whether or not students could be “inspired” by a more successful other that was similar to the person of interest. The theoretical framework for this comparison was social comparison theory. This study was similar to that of Lockwood and Kunda (1999; see below for more) and achieved similar results to that of Lockwood and Kunda.

Burleson, Leach, and Harrington’s study concluded that inspiration came about when participants saw someone similar to himself or herself achieve greatness that is perceived as attainable. Inspiration in this study was assumed as the phenomenon was not directly measured or conceptualized but rather used as a label for the motivational change that occurred during the study.

Csikszentmihalyi, M. (1990). *Flow*. New York: Harper & Row.

Flow is a psychological state that is intently focused that it translates in total immersion into the activity being performed. Csikszentmihalyi studies what causes this psychological state and documents the benefits from being in a state of flow. Deci and Ryan (2000) have linked flow as a consequence of being intrinsically motivated, because the person is performing the activity for the activity itself, much like flow is a state of total immersion. Optimal performance and experience is highly desirable in not just sport but life as a whole, and getting into a state of flow according to Csikszentmihalyi flow is capable of producing such performances and experiences. In this book, Csikszentmihalyi outlines several principles and guidelines to achieve flow because human experience and meaning of happiness varies from person to person. Beginning with intrinsic motivation (enjoyment of an activity) when starting a game or activity, one is more likely to be within the principles necessary for flow to occur.

Deci, E. L., & Ryan, R. M. (2000a). The “what” and “why” of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, *11*, 227-268.

Some theories of motivation postulate that the value people place in goals influences effort to achieve. Deci and Ryan integrated Self-Determination Theory and the fulfillment of the needs for competence, relatedness, and autonomy to explain how people are motivated towards the achievement of goals. Specifically, Deci and Ryan looked into what specifically about goals fulfilled the three basic needs and why these

goals are important to the fulfillment of one's needs. This paper explains how the self in Cognitive Evaluation Theory evaluates goals and works to achieve them in fulfilling the basic needs and facilitating autonomous motivation. Those that actively integrate the needs into achieving goals facilitated intrinsic motivation and thus made goal attainment more likely. Those that do not integrate one's needs had poorer motivation and performances.

Deci, E. L., & Ryan, R. M. (2000b). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55, 68-78.

Deci and Ryan wrote about the connection of psychological need fulfillment and its impact of health and well-being. Human beings are organisms that are constantly proactive in social contexts and environments. This active role one has in his or her environment allows one to evaluate how the environment fulfills and addresses one's needs for competence, autonomy, and relatedness. Self-Determination Theory bases itself off the fact that when need fulfillment is achieved, one becomes highly motivated and it facilitates intrinsic motivation. This specific paper addresses that need fulfillment leads to better social development and well-being. In a previous paper (see previous source) goal pursuit was addressed, and goal achievement could lead to better well-being. Also, when one is intrinsically motivated, one interacts completely and healthily within the social environment, thus leading to improved development. Environments that foster competence, relatedness, and on autonomy allow people to feel good about their abilities,

that they are in control of their actions, and that people can interact and rely on others which are all pieces of social development. In sum, need fulfillment influences healthy consequences.

Eccles, J., & Midgley, C. (1989). Stage-environment fit: Developmentally appropriate classrooms for young adolescents. In C. Ames & R. Ames (Eds.), *Research on motivation in education: Goals and cognitions* (Vol. 3, pp. 139-186). New York: Academic Press.

Motivation levels of students, especially those in junior high school vary significantly and can impact the quality of education that students receive. Eccles and Midgley in their book chapter on classroom environment did a meta-analysis of numerous studies analyzing attitudes toward school, academic subjects, and student self-esteem. Most of the unfavorable results came from classrooms in which the teacher was controlling and autonomy was taken away from the students. Eccles and Midgley then focus on the differences in classroom environment between the elementary and junior high school years and found through a review of literature that elementary classrooms, among many factors, were more organized (included task organization), student management was different and choices were offered more (increasing autonomy), and the grading was less harsh yet conducive to the learning process (increasing competence) than junior high classrooms. Self-Determination Theory can be attributed to the better classroom environment and motivation levels because of the increase in competence and perceived autonomy, two crucial components to self-determined motivation. This chapter

documents that SDT can increase motivation given that competence, relatedness, and autonomy are emphasized and implemented.

Festinger, L. (1954). A theory of social comparison process. *Human Relations*, 7, 117-140.

Festinger's is the originator of social comparison theory, which assumes that one's similarity towards another is grounds for comparison. There is a tendency or drive for humans to compare to others, and comparison differs across content domains. Social comparison is more likely to happen when the person of interest (i.e. the person one is comparing him or herself with) is similar to the person comparing. For example, two athletes playing the same sport from similar backgrounds might be grounds for comparison. Social comparison theory was the theoretical framework for the earlier studies that investigated inspiration (see Lockwood & Kunda, 1999). Although social comparison theory explains the potential reasons as to why people become inspired by others, the theory has yet to be studied with a sound conceptualization of inspiration. Festinger's work brings to light other potential mechanisms that might work to explain why one becomes inspired.

Gould, D., Greenleaf, C., & Krane, V. (2002). Arousal-Anxiety and sport behavior. In T. Horn, (Ed.) *Advances in Sport Psychology*, (pp. 207-241). Champaign, IL: Human Kinetics.

Athletic performance is often affected by one's arousal or emotions, and this interaction is often alluded to in the media (i.e. sport shows, newspapers). Often times, arousal becomes synonymous with energy, anxiety, and the like. Gould, Greenleaf, and Krane's book chapter identifies and defines arousal, stress, and anxiety and how it affects performance and behavior. Of particular interest in sport psychology is the effect of arousal on athletic performance and whether or not it is facilitative or debilitating. Gould, Greenleaf, and Krane provide a clear definition of arousal and provide many citations to studies that further validate positive and negative effects of arousal. Arousal is "a unitary construct that embraces both the psychological and physiological energetic systems" (208). Since inspiration is also described as an energizing event (see Hart 1998), it is important to differentiate arousal from inspiration so as to conceptualize the phenomena as strong as possible. Arousal provides no direction for the energy experienced as inspiration does, and arousal also does not account for the transcendence experience of inspiration, implying inspiration to be a deeper experience and phenomenon.

Gould, D., Weinberg, R. S., & Jackson, A. (1980). Mental preparation strategies, cognitions, and strength performance. *Journal of Sport Psychology*, 2, 329-339.

Gould, Weinberg, and Jackson designed a study to test mental preparation strategies, in particular arousal regulation, on a performance task to test whether or not performance can increase. Using a strength task, the authors found that arousal regulation via mental imagery and focusing tasks increased one's performance. Arousal, as identified in Gould, Greenleaf, and Krane's book chapter (2002) is associated with

increases in performance when managed correctly. Inspiration is also theorized to increase performance (see Thrash & Elliot, 2002; 2003). Inspiration alludes to a transcendence of one's abilities (Thrash & Elliot, 2002; 2003), meaning that one feels as though he or she can go beyond previous achievements, which is similar to performance enhancement, but arousal regulation lacks the feeling of transcendence. Gould, Weinberg, and Jackson's study is one of several that illustrate the importance of arousal regulation because when appropriately regulated, arousal can increase one's performance.

Guay, F., Vallerand, R. J., & Blanchard, C. (2000). On the assessment of situational intrinsic and extrinsic motivation: The Situational Motivation Scale (SIMS). *Motivation and Emotion, 24*, 175-212.

The Situational Motivation Scale (SIMS) is designed to assess one's motivation at the situational level of Vallerand's (1997) hierarchy of intrinsic motivation across the spectrum of motivation: from amotivation to intrinsic motivation. This article is the development of the SIMS and its validation process. The SIMS is a 16-item measure made up of four subscales with each subscale having four questions. The questions are on a Likert scale ranging from "corresponds not at all" to "corresponds exactly" on a 7 point scale. Guay, Vallerand, and Blanchard ran five studies to validate the SIMS and the scale correlated well with other constructs in motivation thus demonstrating the construct validity of the SIMS. Alpha was reported between .77 and .95 for the four subscales in the SIMS measure, which is adequate reliability for a measure. Assessing situational

motivation allows for researchers to measure the day to day fluctuations in one's motivation which can explain differences in attitude and performance over time.

Hanin, Y. (1989). Interpersonal and intragroup anxiety in sports. In D. Hackfort & C. D. Spielberger (Eds.) *Anxiety in Sports: An International Perspective*, (pp. 19-21). New York: Hemisphere.

Hanin's book chapter on anxiety in sports defines trait and state anxiety and provides how anxiety is measured. Two groups of anxiety are examined specifically interpersonal anxiety amongst people as well as intragroup anxiety or anxiety among groups of people and their effects on performance. Hanin's book chapter examines the assessment of anxiety in sport and how practical these assessments are for research. The trait and state anxieties examined in this book chapter fit into the individual zones of optimal functioning (IZOF). How one regulates anxiety in certain situations is vital to one's performance and could alter that particular person's IZOF profile. Hanin outlines future research necessary to help maintain and keep consistent one's IZOF so as to make performance as consistent as possible at a high level. Of particular importance is the environment around the athletes as they train and compete, which could facilitate optimal functioning or could negatively effect functioning. State anxiety is most effected in the environmental setting, and this adds to the use of the IZOF model as a sound measure to encourage peak performance.

Hanin, Y. (1997). Emotions and athletic performance: Individual zones of optimal functioning model. *European Yearbook of Sport Psychology, 1*, 29-72.

Arousal regulation is an area of sport psychology that is well researched and arousal levels have been attributed to both enhancing performance as well as being detrimental towards performance. Hanin developed a model called the individual zones of optimal functioning (IZOF), which explains how each athlete has a different level of arousal in order to achieve peak performance in addition to experiencing different emotions. Before Hanin, research postulated that there is a certain point for all athletes where arousal at such a high level becomes detrimental for performance. Hanin's research individualized how arousal is approached for each individual because some athletes need a lot of stimulation and arousal while other athletes do not need much arousal or stimulation at all. Noticing these differences allows for each individual person to recognize an optimal level of arousal necessary to perform at a high level consistently rather than everyone being held to a certain breaking point where performance then suffers. Hanin's research also gives specifics into how arousal is defined, conceptualized, and related to other constructs.

Hart, T. (1998). Inspiration: Exploring the experience and its meaning. *Journal of Humanistic Psychology, 38*, 7-36.

Hart explored the experience and meaning of inspiration to ordinary people in a qualitative investigation. Four general phenomenological characteristics emerged from

Hart's research, with all experiences of inspiration containing these aspects: connection, opened, clarity, and energy. Explaining these aspects further, participants that experienced inspiration were connected to an object (i.e. future self, ideas, etc), opened to something beyond the participant's control, experienced clarity or a "heightened sense of awareness," and experienced a substantial shift in physical and emotional energy. Understanding the "lived experience" of someone experiencing inspiration adds valuable information to statistics that claim one is or was inspired. Further, Hart's qualitative work enables researchers to understand that people differentiate inspiration and motivation as Hart's participants did. Using that differentiation enables researchers to begin to link theories of motivation to conceptualize inspiration.

Hollembek, J., & Amorose, A. J. (2005). Perceived coaching behaviors and college athlete's intrinsic motivation: A test of self-determination theory. *Journal of Applied Sport Psychology, 17*, 20-36.

Self-determination theory was used as a framework in Hollembek and Amorose's (2005) study on whether or not the three basic needs of SDT mediated perceived coaching behaviors as well as an athlete's intrinsic motivation. How a coach behaves in addition to what a coach says to an athlete can greatly impact intrinsic motivation. If a coach is too dominant or hostile and controlling, then an athlete's perceived autonomy and competence can suffer and ultimately motivation suffers. High democratic behavior is most advantageous to facilitating autonomy according to the literature review in this study. The results of this study show that coaching behaviors can

strongly affect the three basic needs of SDT and most importantly intrinsic motivation. This study shows that motivation can change given a wrong environment or poor coaching, which adds value to researching any ways that motivation could potentially be enhanced or changed so as to develop harder working athletes and greater enjoyment in sport. This study also develops validity for using Richer and Vallerand's (1998) feelings of relatedness scale in sport by changing the words from a work environment to a sport environment.

Hodgins, H. S., & Knee, C. R. (2002). The integrating self and conscious experience. In E. L. Deci & R. M. Ryan (Eds). *Handbook of Self-Determination Research*. Rochester, New York: University of Rochester Press, 87-100.

Theoretically, in looking to increase motivation by an environmental stimulus, evaluating the underlying mechanisms of motivation research. Specifically, research should evaluate the role of the self in self-determination theory (SDT) and how the self operates in order to fulfill the three basic human needs identified in self-determined motivation This book chapter in the *Handbook of Self-Determination Research* focuses on the cognitive aspect of SDT, but specifically Cognitive Evaluation Theory CET and the role of the self in fulfillment of the needs for competence, relatedness, and autonomy. Hodgins and Knee explain how the self evaluates the environment around someone, specifically the social environment. This evaluation of the social environment by the self and how well it supports the basic needs for competence, relatedness, and autonomy will effect one's intrinsic motivation and internalization.

Kruglanski, A. W., & Mayless, O. (1990). Classic and current social comparison research: Expanding the perspective. *Psychological Bulletin, 108*, 195-208.

Social comparison research was the first framework used in studying inspiration in recent work. Kruglanski and Mayless examine further the implications of using social comparison theory by examining how it's done, who is compared, and when is it done. Their findings provide more background in understanding how social comparison works and how one can claim that inspiration may actually be a result from one comparing himself or herself to another. Social comparison theory remains a framework that possibly explains why certain people are seen as "inspirational" or "inspiring" because of how people relate themselves to the person of interest. Understanding what people look for in comparisons helps to understand how people can relate to a stimulus and thus has implications into Self Determination Theory (SDT) and its sub-theory, Cognitive Evaluation Theory (CBT). Using SDT

Lockwood, P., & Kunda, Z. (1999). Increasing the salience of one's best selves can undermine inspiration by outstanding role models. *Journal of Personality and Social Psychology, 76*, 214-228.

Lockwood and Kunda looked at priming students to think of their best accomplishments or to think of something mundane (i.e. what they did yesterday) followed by the students reading about a superior other from a newspaper. Motivation levels decreased as a result of thinking of one's best accomplishment, whereas motivation

increased for those who thought of something mundane because they say the accomplishment attainable. This study concludes that inspiration came about when participants saw someone similar to themselves achieve greatness perceived as attainable. Although the word inspiration was used to account for the motivation change, inspiration was not defined, conceptualized, or directly measured. The results are thought provoking and can influence researchers to postulate that motivation changes might be related to one being inspired, but as with other social comparison theory studies, inspiration must be conceptualized and directly measured.

Loveland, K. K., & Olley, J. G. (1979). The effect of external reward on interest and quality of task performance in children of high and low intrinsic motivation. *Child Development, 50*, 1207-1210.

The effects of rewards on task performance are documented as hurting performance and this impacting motivation towards a task negatively. Loveland and Olley verify the previous research on rewards and task performance by studying pre-school children and studying high interested children and low interested children and how rewards effect their performance on a task, in this particular study it was a drawing task. The results revealed that those who were rewarded and were high in interested actually performed worse than those high in interest that received no reward. The low interest group still performed the same however the rewarded low interest group drew more. Here, the literature reveals the negative impact rewards can have on interest level even in small children at a young age, but rewarding did influence low interest children to draw

more frequently. Understanding the impact on motivation can help practitioners and researchers better understand human motivation and how to influence motivation positively.

McAuley, E., & Tammen, V. V. (1989). The effects of subjective and objective competitive outcomes on intrinsic motivation. *Journal of Exercise and Sport Psychology, 11*, 84-93.

Research on whether or not external influences (i.e. winning and losing) have a positive or debilitating effect on intrinsic motivation. Motivation change is desirable is one is low in intrinsic motivation, but when one is high in intrinsic motivation and motivation subsequently decreases due to a less than favorable outcome, then change is not desirable and prevention of motivation loss is implemented. McAuley and Tammen set out to learn about the effects on competitive outcomes on intrinsic motivation and what the consequences are for motivation level. The framework used in this study was self-determination theory (SDT) but specifically the cognitive evaluation sub-theory (CET) that explains how the self perceives experiences as fulfilling or not fulfilling which can impact intrinsic motivation. In this particular study, those that perceived themselves as successful, regardless of win or loss, were remained high in intrinsic motivation while those low who did not see themselves as successful declined in motivation. McAuley and Tammen's study adds to the body of literature that motivation can be changed and SDT is important in changing motivation and facilitating intrinsic motivation.

Orlick, T. D., & Mosher, R. (1978). Extrinsic awards and participant motivation in a sport related task. *International Journal of Sport Psychology, 9*, 27-39.

Sport psychology and motivation research has well documented the effects of awards on motivation. Extrinsic awards influences people to be extrinsically motivated, or only doing something for the award and not for the activity itself. Take away the award and motivation decreases. Orlick and Mosher's study verifies the research done on awards in sport and was one of the first studies to verify this information. This is a study that shows motivation change over time, proving that motivation can increase or decrease and subsequently affecting performance and work ethic. Coaches can benefit from understanding how to influence their athletes' motivation because having an intrinsically motivated athlete will result in more persistence and a better athletic experience. In today's society where athletes are given scholarships and salaries, even though the athletes are receiving an award for their efforts, it impacts their motivation to be extrinsically motivated only and not motivated for the enjoyment of the activity. Orlick and Mosher's research helps researchers and coaches better understand how to impact motivation.

Pelletier, L. G., Fortier, M. S., Vallerand, R. J., Tuson, K. M., Brière, N. M., & Blais, M. R. (1995). Toward a new measure of intrinsic motivation, extrinsic motivation, and amotivation in sports: The Sport Motivation Scale (SMS). *Journal of Sport & Exercise Psychology, 17*, 35-53.

The Sport Motivation Scale (SMS) is a 28-item scale developed by Pelletier, Fortier, Vallerand, Tuson, Brière, and Blais. The SMS is a measure of contextual motivation, or one's motivation towards a specific aspect of life, for example work, school, and sport on a consistent basis. The SMS provides scores for seven forms of motivation on a 7 point Likert scale on the following subscales: three scores for intrinsic motivation (to know, to accomplish, and to experience stimulation), three for extrinsic motivation (identified, introjected, and external regulation) and a single score for amotivation. Reliability for the SMS was reported between .71 to .85 for the subscales. Measuring contextual motivation allows for researchers and practitioners to assess how an athlete is oriented towards his or her sport and can explain situational tendencies. When working at the situational level, understanding the overall disposition of an athlete helps researchers understand motivation from a holistic perspective.

Prenzel, M., Kramer, K., & Drechsel, B. (1998). Changes in learning motivation and interest in vocational education: Halfway through the study. In L. Hoffmann, A. Krapp, K. A. Renninger, & J. Baumert (Eds.), *Interest and learning. Proceedings of the Seeon-Conference on Interest and Gender* (pp. 430-440). Kiel, Germany: Institut für die Pädagogik der Naturwissenschaften.

Focusing on changes in learning motivation and interest in education, Prenzel, Kramer, and Drechsel gave a presentation on a study they conducted in vocational education at the halfway point of the study. Self-determination is an important part of

vocational education because as the students are apprentices, they are challenged to take external demands (i.e. classes) while maintaining their motivation. Without self-determination, vocational students are at risk of being unhappy, dropping out, and performing poorly. Prenzel, Kramer and Drechsel found that the students in their longitudinal study had more amotivation in the classroom and were less likely to be introjected and identified in their motivation. These classroom attitudes resulted in a decrease in interest over time when a student is not self-determined in his or her motivation. Although the study was only halfway done, the results are telling in that interest is important for quality effort and work from the students. Without the ability to develop self-determined motivation, the students in the study are less inclined to try or remain interested. Interest is a desired quality which self-determination can increase.

Richer, S.F., & Vallerand, R.J. (1998). Construction et validation de l'Échelle du sentiment d'appartenance sociale. *Revue européenne de psychologie appliquée*, 48,129-137.

Richer and Vallerand (1998) developed a scale measuring perceived relatedness, the Need for Relatedness Scale. Perceived relatedness is one of the three basic needs of self-determination theory, and is an integral part towards developing self-determined motivation. The scale is a 10-item scale made up of two five item subscales: 5 items each for acceptance and intimacy. The scale is a 7-point Likert scale originally was developed to measure how co-workers felt about each other to develop good relationships at work. Richer and Vallerand encourage the scale to be used in other domains, and sport is one of

those domains that the scale was adjusted to measure (see Hollembeak & Amorose, 2005) and it was done reliably. Understanding how people develop a feeling of relatedness is important because research in SDT shows that people often do tasks to feel related to others. If one can develop an environment that facilitates relatedness, than intrinsic motivation can increase.

Roberts, G. C. (2001). Understanding the dynamics of motivation in physical activity:

The influence of achievement goals on motivational processes. In G. C. Roberts (Ed.), *Advances in Motivation in Sport and Exercise* (pp. 1-50). Champaign, IL: Human Kinetic Publishers.

Glyn Robert's book chapter lays out the role of motivation in sport and exercise by explaining different theories and their application. Robert's focuses on achievement goal theory especially and how differentiating and understanding one's goal orientation can increase or decrease motivation. One of the best points of this chapter is Robert's definition of motivation: the energization, direction, and regulation of one's behavior over time. Another important part of this chapter is the explanation of constraints as well as common misuses of motivation. Having a clear definition of what motivation is allows for research to examine how motivation can be effected and how it can change. Robert's concludes his chapter with the importance of motivation in sport and exercise participants, and that a change or enhancement of motivation is vital to increased participation and in some cases improved performance.

Ryan, R. M. (1995). Psychological needs and the facilitation of integrative processes. *Journal of Personality, 63*, 397-427.

Cognitive evaluation theory (CET) states that the self looks to the environment and cognitively processes stimuli to assess how the environment facilitates the three psychological needs for self-determination theory (SDT): autonomy, competence, and relatedness. In his paper, Ryan argues that personal and social development are active integrative tendencies that are dependent upon the social-context when considering the psychological needs that make up SDT. The environment in which human beings work and interact in are a major influence in the development of becoming self-determined in one's motivation, and Ryan examines what makes an environment or one's social-context facilitative towards the self integrating stimuli. Ryan recognizes that not all human behavior is intrinsically motivated, but behavior can become closer to intrinsic motivation through what Collins (1997) deemed internalization. The individual needs to move towards becoming self-regulated and not externally regulated in order to accomplish internalization. Ryan's paper brings to light the importance of recognizing how to internalize behaviors so as to enhance motivation.

Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55, 68-78.

Ryan and Deci's paper on self-determination theory (SDT) further elaborates on their motivational theory and takes into account the social-contextual aspects that encourage development of psychological well being. Ryan and Deci provide a working definition of motivation: "Motivation concerns energy, direction, persistence and equifinality- all aspects of activation and intention" (p 69). Intrinsic motivation is the most desirable motivation and it is attained through self-regulation, or what the self perceives as important. Social contexts, or one's social environment, can facilitate non-intrinsically motivated behaviors or intrinsically motivated behaviors depending on the nature of the context. Those contexts that facilitate autonomy, relatedness, and competence will encourage intrinsic motivation to develop. Besides a boss, coach, or supervisor's actions or words, the social context is also vital to developing optimal motivation. Ryan and Deci postulate that intrinsic motivation translates into psychological well being, thus making intrinsic motivation highly desirable and important to life and further adding to the relevance of having self-determined motivation and researching SDT.

Sarver, M. D. (2000). *A study of the relationship between personal and environmental factors on self-determination and the academic success of university students with learning disabilities*. Unpublished doctoral dissertation, University of Florida, Gainesville, FL.

Self Determination Theory (SDT) is theorized to translate into performance benefits, and Mary Sarver's doctoral dissertation documents performance gains from self-determined individuals. Sarver's area of expertise is in students with learning disabilities, and her dissertation focused on the benefits of being self-determined as a student with a disability. The results show that students who were more self-determined in their motivation were more likely to be resilient to failure and maintained higher grades than those low in self-determined motivation. Sarver also alludes to these results in another paper (see Field, Sarver, & Shaw, 2003), which highlights SDT as a key to success for students with learning disabilities in postsecondary education. Resilience to failure is a highly desirable trait, thus making self-determined motivation advantageous to achieve in individuals.

Sonstroem, R. J. (1984). An overview of anxiety and sport. In J. M. Silva & R. S. Weinberg (Eds.) *Psychological Foundations of Sport*, (pp. 104-117). Champaign, IL: Human Kinetics.

Anxiety in sport is a broad subject area that also includes arousal. Sonstroem writes an introductory chapter, which talks about anxiety and arousal, the different

theories for each, and how arousal can aid or impede performance gains. In arousal theories, there are two that are discussed at length: drive theory and the inverted-U hypothesis. Drive theory is a factor of habit strengths and drive state or one's current feelings towards doing something. The inverted-U hypothesis states that anxiety and arousal is good for peak performance to a degree, but too much or too little arousal is bad for performance so the graphical curve is the shape of an inverted U. Hanin has furthered arousal research from the inverted-U hypothesis to individual zones of optimal functioning (IZOF), which allows anxiety and arousal to be individualized rather than one uniform curve. Arousal and task complexity are also discussed in the chapter as more complex tasks such as putting might need less arousal than a power task such as weight lifting. Several studies are discussed on the performance benefits of arousal, adding evidence behind arousal as a performance enhancer.

Swain, A., & Jones, G., (1992). Relationships between sport achievement orientation and competitive state anxiety. *The Sport Psychologist*, 6, 42-54.

Arousal regulation is important in achieving peak performance, as too much or too little arousal and anxiety could lead to detrimental performances. Swain and Jones studied track athletes leading up to their season and monitored with competitive anxiety as the season neared. As a competition or event nears, Swain and Jones found that that negative thoughts and feelings associated with competition increase. Specifically, the athletes were split into a high and low anxiety group, but as competition neared there was no change in anxiety in the high anxiety group; however, the increase was in the low

anxiety group. This study is a prime example of how anxiety can be detrimental to one's arousal levels because it was competitiveness specifically that impacted anxiety the most. Focusing on how to prepare the athletes to deal with the impending stress of competing is important for sport psychology practitioners.

Thrash, T. M., & Elliot, A. J. (2002). Implicit and self-attributed achievement motives: Concordance and predictive validity. *Journal of Personality, 70*, 729-756.

Implicit and self-attributed achievement motives play a considerable role in personality psychology, and Thrash and Elliot studied the two motives as antecedents of achievement goals. Implicit achievement motives are the motives that are consistent in animals and humans and are primitive in nature, whereas self-attributed achievement motives are conscious efforts reflecting one's values and desire to achieve something. Thrash and Elliot are researching where or not implicit and self-attributed achievement motives have concordance and are moderated by self-determination theory. The results of the study yield that implicit and self-attributed achievement motives are concordant and correlate positively with need for achievement and fear of failure. Self-determined motivation influenced the results because those high in SDM had greater concordance toward need for achievement versus those low in SDM who had greater concordance toward fear of failure. In SDT, the self is the center of decision making and all decisions are influenced by the self's basic needs. Thrash and Elliot cite this article in their 2004 inspiration paper because SDT and achievement motives may influence whether or not

someone is actually inspired to do something. If one is high in SDM, then it is possible he or she is more apt to become inspired to do something.

Thrash, T. M., & Elliot, A. J. (2003). Inspiration as a psychological construct. *Journal of Personality and Social Psychology*, *84*, 871-889.

Inspiration is a psychological phenomenon that lacked research and a sound conceptualization. Thrash and Elliot were the first to conceptualize inspiration as a phenomenon that: is evoked, implies motivation, and causes transcendence of one's perceived capabilities. Motivation differs from inspiration because it is the energization, direction and regulation of one's behavior over time and is internally regulated but influenced from outside stimuli (see Roberts, 2001), inspiration implies motivation and is an evoked sense of energy. Thrash and Elliot also developed a measure of inspiration named the Inspiration Scale (IS), which is a 4-item scale with two questions per item for a total of 8 questions. The paper concludes with antecedents and consequences of inspiration. The antecedents of inspiration, on a trait level, are generally categorized as "appetitive motivational" states such as openness to experience and work mastery. On a state level, the antecedents for inspiration were openness to aesthetics, absorption, and self-forgetfulness. The trait level of inspiration has consequences of work mastery, which refers to working hard and seeing a project through. At the state level, the consequences of inspiration are transmission (i.e. acting to do something), work mastery, and elevated levels of transcendence (Thrash & Elliot, 2004). The most important consequence of trait inspiration is self-determination, which emerged as a result of inspiration.

Thrash, T. M., & Elliot, A. J. (2004). Inspiration: Core characteristics, component processes, antecedents, and function. *Journal of Personality and Social Psychology, 87*, 957-973.

Inspiration was first conceptualized and measured in Thrash and Elliot's 2003 study, but the study focused on inspiration as a trait and not as a state. Thrash and Elliot's 2004 study furthered the study of inspiration by investigating inspiration as a state, how it differentiates from positive affect (PA, inspiration's strongest known correlate), and exploring further "inspired to" and "inspired by." After some research, Thrash and Elliot concluded that the difference between inspiration and activated PA is that inspiration is involved greater transcendence and lack of responsibility for being inspired, while activated PA is has greater responsibility and is more of an appetitive state. Looking into inspired to and by, Thrash and Elliot's IS (2003) measures the "inspired by" and "inspired to" mechanisms. Inspiration can cause one to look in awe of a beautiful scene and be inspired by, or one can see an amazing performance and be inspired to go and do something. Being "inspired to" do something has implications for motivation as it can cause someone to act. Further research calls for the manipulation of inspiration and its effects on motivation.

Tynes, L. L., & McFatter, R. M. (1987). The efficacy of 'psyching' strategies on a weightlifting task. *Cognitive Therapy and Research, 11*, 327-336.

Tynes and McFatter tested four mental training techniques on 36 participants on a weightlifting task. The mental training techniques (self-efficacy, attentional focus, imagery, and preparatory arousal) were tested against a distraction condition. The study concluded that mental training techniques enhanced performance, with the preparatory arousal technique producing the best results. Arousal preparatory or "psyching" as Tynes and McFatter allude to as a popular term has long been associated with performance increases, and this study adds to the body of knowledge that shows arousal can enhance performance if one mentally prepares and harnesses the energy. All of the participants took part in each of the four mental preparation conditions, thus each person was their own control group. Engaging in mental preparatory techniques can enhance performance, but this is seen in a strength task, which is a popular means of testing. Therefore, even though arousal regulation translates into better performance, it is important to test these techniques on other sports. This article will help differentiate arousal from inspiration because although both are energizing events, inspiration provides more of a direction and is a deeper experience (see Thrash & Elliot, 2003).

Vallerand, R. J. (1997). Toward a hierarchical model of intrinsic and extrinsic motivation. In M. P. Zanna (Ed.) *Advances in experimental social psychology* (Vol. 29, pp.271-360). New York, New York: Academic Press.

The hierarchical model of intrinsic and extrinsic motivation that Vallerand postulates looks at three categories of motivation on a hierarchy from no motivation (amotivation) to motivated to do an activity for the enjoyment of doing that activity (intrinsic motivation). Further explanation of these categories can be read in Vallerand's (2002) book chapter in the *Handbook of Self-Determination Research*. Not only does Vallerand look at motivation on a hierarchy, but he also looks at motivation on three different levels: situational, contextual, and global. Vallerand postulates that people's motivation is different at the situational, contextual and global levels. For example, one might have a strong interest and take pleasure in participating in sporting games (contextual), but there might be a time where one is tired or burned out (situational) and motivation will be low. Taking into account one's motivation at the three levels Vallerand proposes gives researchers a comprehensive view of one's motivational make up on several levels, enabling for more explanation and reasoning as to changes in motivation and how to further enhance motivation.

Vallerand, R. J. (2001). A hierarchical model of intrinsic and extrinsic motivation in sport and exercise. In G. C. Roberts (Ed.), *Advances in Motivation in Sport and Exercise* (pp. 263-320). Champaign, IL: Human Kinetic Publishers.

The hierarchical model of intrinsic and extrinsic motivation by Vallerand is well documented in his several publications, but in Robert's *Advances in Motivation in Sport and Exercise*, the model is tailored to sport. Vallerand reiterates the levels of motivation (global, contextual, and situational) as well as the spectrum from amotivation to intrinsic motivation with examples in athletics. Vallerand also presents several scales that can measure motivation in sport, such as the Sport Motivation Scale (SMS), which measures contextual motivation. The chapter concludes with postulates on the consequences of amotivation, extrinsic motivation, and intrinsic motivation and the introduction of the Situational Motivation Scale (SIMS). Vallerand's chapter is a valuable starting point for applying the hierarchy to sport and provides insight into measurement at different levels of motivation. Future research ideas include further application of the scales mentioned in the chapter as well as whether which factor: personal or social, plays a bigger role in development of motivation.

Vallerand, R. J. (2002). Intrinsic and extrinsic motivation: A hierarchical model. In E. L. Deci & R. M. Ryan (Eds.). *Handbook of Self-Determination Research* (pp. 37-63). Rochester, New York: University of Rochester Press.

Vallerand's studies on motivation have categorized the phenomena into three categories on a hierarchy: intrinsic motivation, extrinsic motivation, and amotivation. In categorizing motivation, Vallerand enables there to be more of a descriptions of human behavior with the hopes of further understanding of why people behave differently. Within Vallerand's three categories of motivation are several sub-categories, which help add continuity to the hierarchy. Amotivation stands alone, as the lack or absence of motivation. Extrinsic motivation, which is motivation from an outside source (i.e. rewards, privileges, etc.) has the following categories with move closer to intrinsic motivation: external regulation, introjected regulation, and identified regulation. Intrinsic motivation, or the motivation to do an activity for the sake of the activity (the most desired form of motivation), has the following categories: intrinsic motivation to know, to accomplish, and to experience stimulation. Vallerand's research allows for researchers to identify where participants are in their motivation to do something, and using Vallerand's categories aids researchers to make note of how motivated an individual is and how to potentially increase that person's motivation or identify reasons why individuals are behaving in a particular manner.

Vallerand, R. J., & Bissonnette, R. (1992). Intrinsic, extrinsic, and amotivational styles as predictors of behavior: A prospective study. *Journal of Personality, 60*, 599-620.

Studying college students enrolled in a class over the course of a semester, Vallerand and Bissonnette examined the motivation of the students enrolled in the class and examined achievement levels. Specifically, Vallerand and Bissonnette got a complete motivation profile on the students and found that those who had intrinsic motivation, and integrated and identified extrinsic motivation persistent through the course, whereas others with lower motivation dropped out of the course. Persistence is a highly valued attribute in sport among many disciplines, and providing examples of the benefits of being intrinsically motivated is important because any way that motivation can be enhanced should be examined. Even though the students were surveyed on their natural dispositions toward the course Vallerand and Bissonnette examined, certain interventions to increase motivation may decrease the drop out rate for the course. Vallerand and Bissonnette successfully and reliably analyzed student's motivation levels and showed important consequences of different types of motivation.

Whelan, J. P., Epkins, C. C., & Meyers, A. W. (1990). Arousal interventions for athletic performance: Influence of mental preparation and competitive experience.

Anxiety, Stress, and Coping, 2, 293-307.

Whelan and his colleagues tested mental preparation techniques on regulating arousal for performance gains and enhancement, specifically “psyching up techniques”

on a strength task and a reaction time task. Specifically, self-arousal and a given arousal strategies were used against a control group. While arousal is usually used to enhance performances, Whelan, Epkins, and Meyers found that strength performance increased, but reaction time decreased. Heart rate was used as a physiological measure, but more physiological data was most likely needed, as this particular study did not support physiological mediation of arousal levels. Although mentally “psyching up” improved some performances, not all performance increased which heightens awareness of the value of arousal regulation when it comes to athletes and competition. Being overly aroused, as shown by the inverted-U hypothesis can detract from performance. Understanding what a coach’s speech does to players is important as if it can motivate players, then the players will be more invested in the task at hand, but if arousal is a result then it could be detrimental if not controlled properly.

Whitehead, J. R., & Corbin, C. B. (1991). Youth fitness testing: The effect of percentile-based evaluative feedback on intrinsic motivation. *Research Quarterly for Exercise and Sport*, 62, 225-231.

Using Cognitive Evaluation Theory (CBT) from Deci and Ryan’s Self-Determination Theory (1985), Whitehead and Corbin tested whether or not external events increase or decrease perceived competence. Using a physical fitness test with children, Whitehead and Corbin gave false feedback to children after performing the test. The results showed that those given positive feedback had higher intrinsic motivation as measured by the Intrinsic Motivation Inventory (IMI) in comparison to children who

received negative feedback who decreased in intrinsic motivation. This study is important because it illustrates the benefits of SDT and perceived competence on being intrinsically motivated to perform a task. Whitehead and Corbin make note of the results and their implications on those who are administering fitness classes and the role that these individuals can have on someone's intrinsic motivation. When considering a "pep-talk" done by coaches, positive feedback and reinforcing a player's competence should then increase one's intrinsic motivation to compete and perform, but the situational level still has yet to be examined.

Appendix C

INSTRUMENTATION

Demographics Questionnaire

You are invited to participate in this research project that involves completing the following questionnaires included in this packet of materials; this process requires approximately 15 minutes. Participation in this project is anonymous, so there is no way to link you with your responses. The only risk involved in participating is that you may become upset or embarrassed while answering questions about yourself. *Completion and return of this test battery is considered implied consent to participate in this research.*

Your assistance in completing these questionnaires as honestly as possible is greatly appreciated.

Sex (circle one): Female Male **Age:** _____ years

Year in college (circle one): Freshman Sophomore Junior Senior Graduate

Select one or more races in which you belong.

_____ ***American Indian or Alaskan Native*** – A person having origins in any of the original peoples of North or South America (including Central America) and who maintains cultural identification through tribal affiliation or community recognition.

_____ ***Asian*** – A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam.

_____ ***Black or African American – American***, not of Hispanic Origin – Persons having origins in any of the Black racial groups of Africa. Includes persons who indicated their race as Afro-American, Black Puerto Rican, Jamaican, Nigerian, West Indian, or Haitian.

_____ ***Native Hawaiian or Pacific Islander*** - A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands. It includes people who indicate their race as "Native Hawaiian," "Guamanian or Chamorro," "Samoan," and "Other Pacific Islander."

_____ ***White*** - A person having origins in any of the original peoples of Europe, North Africa, or the Middle East.

_____ ***Other: please indicate*** _____

Select your ethnicity.

_____ ***Hispanic or Latino*** – Hispanics or Latinos are persons of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin regardless of race and who maintain cultural identification through tribal affiliation or community recognition.

_____ ***Not Hispanic or Latino***

Situational Motivation Scale (SIMS)

DIRECTIONS: Read each item carefully. Using the scale below, please mark the number that best describes the reason why you are currently engaged in your sport.

Response Scale						
1	2	3	4	5	6	7
Does not Correspond at all	Corresponds a little	Corresponds moderately	Corresponds a lot	Corresponds a lot	Corresponds a lot	Corresponds exactly

- _____ A1. Because I think that this sport is interesting.
- _____ A2. Because I am doing it for my own good.
- _____ A3. Because I am supposed to do it.
- _____ A4. There may be good reasons to do this sport, but personally I don't see any.
- _____ A5. Because I think that this sport is pleasant.
- _____ A6. Because I think that this sport is good for me.
- _____ A7. Because it is something that I have to do.
- _____ A8. I do this sport but I am not sure if it is worth it.
- _____ A9. Because this sport is fun.
- _____ A10. By personal decision.
- _____ A11. Because I don't have any choice.
- _____ A12. I don't know; I don't see what this sport brings me.
- _____ A13. Because I feel good when doing this sport.
- _____ A14. Because I believe that this sport is important for me.
- _____ A15. Because I feel that I have to do it.
- _____ A16. I do this sport, but I am not sure it is a good thing to pursue it.

Inspiration Scale (IS)

D. The definition of **inspiration** is “*a breathing in or infusion of some idea, purpose, etc. into the mind; the suggestion, awakening, or creation of some feeling or impulse especially of an exalted kind.*”

Please rate how you are feeling right now.

1. I am experiencing inspiration.

1	2	3	4	5	6	7
not at all						very deeply or strongly

2. I encountered or experienced something that inspires me.

1	2	3	4	5	6	7
not at all						very deeply or strongly

3. I am inspired to compete.

1	2	3	4	5	6	7
not at all						very deeply or strongly

4. I am inspired to play.

1	2	3	4	5	6	7
not at all						very deeply or strongly

5. I am inspired to perform.

1	2	3	4	5	6	7
not at all						very deeply or strongly

5. I feel inspired.

1	2	3	4	5	6	7
not at all						very deeply or strongly

Sport Motivation Scale (SMS)

DIRECTIONS: Using the scale below, please indicate to what extent each of the following items corresponds to one of the reasons for which you are presently practicing your sport.

Response Scale						
1	2	3	4	5	6	7
Does not Correspond at all	Corresponds a little	Corresponds moderately	Corresponds a lot	Corresponds a lot	Corresponds a lot	Corresponds exactly

- _____ B1. For the pleasure I feel in living exciting experiences.
- _____ B2. For the pleasure it gives me to know more about the sport that I practice.
- _____ B3. I used to have good reasons for doing sport, but now I am asking myself if I should continue doing it.
- _____ B4. For the pleasure of discovering new training techniques.
- _____ B5. I don't know anymore; I have the impression of being incapable of succeeding in this sport.
- _____ B6. Because it allows me to be well regarded by people that I know.
- _____ B7. Because, in my opinion, it is one of the best ways to meet people.
- _____ B8. Because I feel a lot of personal satisfaction while mastering certain difficult training techniques.
- _____ B9. Because it is absolutely necessary to do sports if one wants to be in shape.
- _____ B10. For the prestige of being an athlete.
- _____ B11. Because it is one of the best ways I have chosen to develop other aspects of myself.
- _____ B12. For the pleasure I feel while improving some of my weak points.
- _____ B13. For the excitement I feel when I am really involved in the activity.
- _____ B14. Because I must do sports to feel good myself.
- _____ B15. For the satisfaction I experience while I am perfecting my abilities.
- _____ B16. Because people around me think it is important to be in shape.
- _____ B17. Because it is a good way to learn lots of things which could be useful to me in other areas of my life.
- _____ B18. For the intense emotions I feel doing a sport that I like.
- _____ B19. It is not clear to me anymore; I don't really think my place is in sport.
- _____ B20. For the pleasure that I feel while executing certain difficult movements.
- _____ B21. Because I would feel bad if I was not taking time to do it.
- _____ B22. To show others how good I am good at my sport.
- _____ B23. For the pleasure that I feel while learning training techniques that I have never tried before.

- _____ B24. Because it is one of the best ways to maintain good relationships with my friends.
- _____ B25. Because I like the feeling of being totally immersed in the activity.
- _____ B26. Because I must do sports regularly.
- _____ B27. For the pleasure of discovering new performance strategies.
- _____ B28. I often ask myself; I can't seem to achieve the goals that I set for myself.

Need for Relatedness Scale

DIRECTIONS: Using the scale below, please indicate to what extent each of the following items corresponds to one of the reasons for which you are presently playing your sport.

Response Scale						
1	2	3	4	5	6	7
Does not Correspond at all	Corresponds a little	Corresponds a little	Corresponds moderately	Corresponds a lot	Corresponds a lot	Corresponds exactly

- _____ C1. In my relationships with my teammates I feel supported
- _____ C2. In my relationships with my teammates I feel close to them.
- _____ C3. In my relationships with my teammates I feel understood.
- _____ C4. In my relationships with my teammates I feel attached to them.
- _____ C5. In my relationships with my teammates I feel listened to.
- _____ C6. In my relationships with my teammates I feel bonded to them.
- _____ C7. In my relationships with my teammates I feel valued.
- _____ C8. In my relationships with my teammates I feel close knit.
- _____ C9. In my relationships with my teammates I feel safe
- _____ C10. In my relationships with my teammates I feel I am a friend.

Supplemental Questions:

Did you find the stimulus inspiring?

Yes

No

What about the stimulus was inspiring?

APPENDIX D
IRB DOCUMENTATION

COLLEGE OF HEALTH AND HUMAN SCIENCES

DEPARTMENT OF HEALTH AND KINESIOLOGY

INFORMED CONSENT FORM

Title of Project: An Examination of Coaching Behaviors in a Hollywood Movie
Principle Investigator: Stephen P. Gonzalez, P.O. Box 8076, Georgia Southern University, Statesboro, GA 30460, 814-244-3094, stephengonzalez@gmail.com. **Faculty Advisor:** Jonathan N. Metzler, Ph.D., Assistant Professor, Department of Health & Kinesiology, P.O. Box 8076, Georgia Southern University, Statesboro, GA 30460, 912-478-5397, jmetzler@georgiasouthern.edu.

1. **Purpose of the Study:** The purpose of the current study is to examine the effect of inspiration on situational autonomous motivation.
2. **Procedures to be followed:** You will be asked to complete 63 questions on a survey, watch a 4-minute video, and complete 37 questions on a second survey.
3. **Discomforts and Risks:** There is minimal risk for physical or emotional harm should you choose to participate. You may experience some minor embarrassment or discomfort while completing the questionnaires. The video you will watch contains strong and profane language that may be offensive. If you are upset or offended by profanity and strong language, then you may want to consider not participating in the study.
4. **Benefits:** You might learn more about yourself by participating in this study. This research might provide a better understanding of athlete motivation
5. **Duration:** It will take about 15 minutes to complete this study.
6. **Statement of Confidentiality:** Only the person in charge will know your identity. If this research is published, no information that would identify you will be written.
7. **Right to Ask Questions:** You can ask questions about the research at any time. The person in charge will answer your questions. Contact Stephen Gonzalez at 814-255-3377 with questions. For questions concerning your rights as a research participant, contact Georgia Southern University Office of Research Services and Sponsored Programs at 912-681-0843.
8. **Compensation:** There is no compensation for participation in this study. **Voluntary Participation:** You do not have to participate in this research. You can end your

participation at any time by telling the person in charge. You do not have to answer any questions you do not want to answer. **Penalty:** There is no penalty for deciding not to participate in the study. In addition, if you decide at any time you do not want to participate further after beginning the study, you may withdraw without penalty.

1. You must be 18 years of age or older to consent to participate in this research study. If you consent to participate in this research study and to the terms above, please sign your name and indicate the date below.

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

Participant Signature

Date

I, the undersigned, verify that the above informed consent procedure has been followed.

Investigator Signature

Date

Georgia Southern University Institutional Review Board

Proposal Narrative

Personnel. Please list any individuals who will be participating in the research beyond the PI and advisor. Also please detail the experience, level of involvement in the process and the access to information that each may have.

Holli Finnerin, an undergraduate student at Georgia Southern University will be assisting with data entry. Holli is trained in research ethics and confidentiality. The identities of any and all participants will not be traceable; therefore, Holli will have no way of knowing anyone's identity in the study.

Purpose. 1. Briefly describe in one or two sentences the purpose of your research.

The purpose of the current study is to examine the effect of inspiration on situational autonomous motivation. Specifically, this study will assess whether a stereotypical "motivational" stimulus in sport increases inspiration and if these changes are associated with changes in self-determined motivation.

2. What questions are you trying to answer in this experiment? Please include your hypothesis in this section. The jurisdiction of the IRB requires that we ensure the appropriateness of research. It is unethical to put participants at risk without the possibility of sound scientific result. For this reason, you should be very clear on how participants and others will benefit from knowledge gained in this project.

It is predicted that after controlling for contextual motivation and relatedness: 1) When exposed to an inspirational stimulus, participants will increase in inspiration and situational motivation and 2) When exposed to a neutral stimulus, participants will see no change in inspiration and situational motivation. Participants as well as coaches and coaching education professionals will benefit from this study because it will actually take a look into whether or not motivation increases due to one becoming inspired. In sport, motivation of athletes is critical to well-being, enjoyment, and maintaining a level of interest. Understanding how to increase motivation further is beneficial.

3. What current literature have you reviewed regarding this topic of research? How does it help you to frame the hypothesis and research you will be doing? Include citations in the description.

In today's media coverage of sport, the terms motivation and inspiration are often used superficially and synonymously. It is not uncommon for sportscasters and color commentators to speculate about athlete motivation as well as the sources of their motivation using statements such as the "coach is such a great motivator" or that "the crowd motivated this team." Sometimes, sportscasters point toward inspiration as a source of athlete motivation, specifically describing coaches who deliver inspirational locker room speeches to motivate their athletes. This anecdotal evidence points toward a

speculated relationship between inspiration and motivation. More specifically, the casual fan may expect that the pep-talk inspires athletes, thus increasing motivation in the moment of competition. Scholarship both in and out of sport psychology has developed and verified theories to describe mechanisms of motivation change; however, little attention has been given to this perceived role of inspiration. Although recent scholarship has focused on inspiration (Thrash & Elliot; 2003, 2004), no research to date has been found which has investigated the role of “inspirational” tactics in sport on enhancing athlete motivation.

Motivation has been defined as the energization, direction, and regulation of one’s behavior over time (Roberts, 2001). Motivation is internally regulated, yet can be influenced by someone else’s behavior or one’s environment. The key component of motivation is how one internalizes the outside stimulus. There are numerous theories of human motivation; however, the current study focuses on tenets of self-determination theory (SDT) because the theory recognizes that humans actively engage in their environments toward self-growth and fulfillment of needs, encapsulating several theories of psychology. According to SDT, to understand human motivation, scholars must consider innate psychological needs (Deci & Ryan, 1985). Much like plants need water and sunlight to grow, people need relatedness, autonomy, and competence for ongoing psychological growth and well-being. In developing the self, the three basic needs assist one in becoming fulfilled and intrinsically motivated. According to SDT, when one feels autonomous, related to others, and competent at a task, then the person becomes autonomous in their motivation, and the sense of self becomes cognizant. Intrinsic motivation is the highest form of motivation one can achieve, and it is the most advantageous form of motivation (Deci, 1971).

Ryan and Deci (2000a) specifically cite that those who are self-determined have “more interest, excitement, and confidence, which in turn is manifest both as enhanced performance, persistence, and creativity...” (p. 69) than their counterparts. When one is self-determined, one finds value in an activity that develops from the self (Ryan & Deci, 2000). Finding value in an activity or a set of behaviors becomes advantageous because a person involves him or herself on a deeper level, thus improved performance results because an activity is inherently important to the self-determined individual. Other benefits to a more self-determined individual include: interest (Prenzel, Kramer & Drechsel, 1998), persistence (Deci & Ryan, 2000b), resilience to failure (Sarver, 2000), concentration (Deci, Eghrari, Patrick, & Leone, 1994), and flow (Csikszentmihalyi, 1990). Athletes that have the above characteristics, in addition to improved performance, makes an autonomously motivated athlete highly desirable.

Clearly, coaches can draw from this scholarship to possibly enhance athlete motivation; yet, speculation regarding the role of inspiration in enhancing motivation continues to thrive in sport. Recent scholarship suggested that inspiration (Thrash & Elliot, 2003; 2004), a phenomenon that does not originate in the individual, might play an important role in facilitating autonomy and self-determined motivation because inspiration is not initiated directly by an individual, thus a feeling of autonomy to act or feel a certain way. Given the anecdotal adherence of coaches and media to inspiration as a method for enhancing motivation and this recent line of thought, it is important for sport psychology research to examine the role of inspiration in changing athlete motivation.

There are various definitions of inspiration across different fields of study (i.e. religion), but Thrash and Elliot (2003) conceptualize inspiration as an experience that 1) implies motivation, 2) is something that is evoked and not initiated directly, and 3) involves transcendence of one's usual abilities. Inspiration occurs from an outside source and then changes and impacts an individual's motivational processes. Inspiration differs from motivation in that motivation is the regulation, direction, and energy behind one's behavior (Roberts, 2001); whereas inspiration is an evoked sense of energy from a source that implies motivation. State inspiration was the focal point of Thrash and Elliot's (2004) work on inspiration. Within the state experience of inspiration, two component processes were identified: being "inspired by" and being "inspired to." As it is written, the "inspired by" component recognizes the presence of inspiration and not an action tendency to go out and actually do something. When tested in comparison to "inspired by," "inspired to" was positively related to responsibility (i.e. being the origin of the feeling) and approach motivation (Thrash & Elliot, 2004). Inspiration is an external stimulus that could possibly play an important role in influencing one's motivation, or in facilitating self-determined motivation and autonomy (Thrash & Elliot, 2004). In sport, researchers assume coaches or leaders can inspire athletes, or the "inspired by" mechanism. Whether or not they can be inspired to do something is an important concept, hence the potential influence of inspiration on situational motivation.

Of particular interest, is whether or not inspiration can increase situational motivation. A powerful speech, quote, or action clip that tends to energize the intended audience often characterizes inspiration in sport. Because of the interest of the authors in the "pep-talk" or "inspirational speeches" that coaches often give to teams before and during games, it is appropriate that the situational motivation levels are examined due to the unknown length that inspiration may or may not have on motivation. To date, no one has studied whether inspiration actually increases autonomous motivation. Correlations have been made (Thrash & Elliot, 2003; Thrash & Elliot 2004) and implied motivational changes have been made (Lockwood & Kunda, 1999; Bursleson, Leach, & Harrington, 2005), but the true test of a variable is its manipulation.

Outcome. Please state what results you expect to achieve?

I expect that participants that are in the experimental group will increase in inspiration and as a result will also increase in situational self-determined motivation. Those in the control group should see no increase in inspiration and therefore no increase in situational motivation. If changes in inspiration associate with changes in situational motivation, sport psychology scholars may want to invest in understanding inspiration mechanisms in sport especially given the anecdotal evidence that coaches "motivate" athletes by delivering inspiring messages.

Who will benefit from this study? How will the participants benefit (if at all). Remember that the participants do not necessarily have to benefit directly. The results of your study may have broadly stated outcomes for a large number of people or society in general.

Coaches, sport psychology consultants, coaching educators, and athletes will all benefit from the results of this study because this study is going to take a scientific approach to whether or not the experience of a pep-talk can actually inspire someone, and if so, does it relate to increases in motivation. When listening and watching ESPN and other sport networks, the color commentators often blur motivation and inspiration when talking about coaches speaking with teams. This study looks scientifically investigate this process of inspiring someone and its consequences. To my knowledge, this study represents an initial attempt in sport psychology to understand inspiration in sport.

Describe your subjects. Give number of participants, approximate ages, gender requirements (if any).

Describe how they will be recruited, how data will be collected (i.e., will names or social security numbers be collected, or will there be any other identification process used that might jeopardize confidentiality?), and/or describe any inducement (payment, etc.) that will be used to recruit subjects. Please use this section to justify how limits and inclusions to the population are going to be used and how they might affect the result (in general).

This study will include 114 male collegiate football players from several universities and colleges in the United States at the NCAA Division I level. Participation in the study will be voluntary and consent will be obtained prior to participation. The participant pool will be a convenience sample and the participants will be randomly assigned to either the experimental group or the control group. Participants will be at least 18 years of age and informed consent will be given to each participant. Participation in the study is voluntary and each person will be made aware that they can leave the study at any time. No names will be taken and none of the information collected will be able to be traced back to a particular person. Information will be kept in a locked cabinet in the sport psychology laboratory, which is a limited access area to insure safety of data. No payment will be used to recruit subjects. Subjects will be recruited via their coaches, and coaches will be contacted by both email and phone calls. After gaining permission from coaches, athletes will then be addressed in a classroom at the university where they play and will be told the following “My name is Stephen Gonzalez, and I am a graduate student at Georgia Southern University. I am interested in looking at coaching behaviors and am looking for athletes to look at some movie clips and fill out some surveys regarding the coaches in these movie clips. The movie clips contain some strong language and profanity, if this is something that bothers you, you do not have to participate and can leave. This process takes about 15 minutes total. Please know that your participation is completely voluntary so if you do not want to participate you do not have to.” Athletes not participating will then be allowed to leave and the others will stay to watch the movie clips and answer the surveys.

Methodology (Procedures). Enumerate specifically what will you be doing in this study, what kind of experimental manipulations you will use, what kinds of questions or recording of behavior you will use. If appropriate, attach a questionnaire to each submitted copy of this proposal. Describe in detail any physical procedures you may be performing.

Athletes will be randomly assigned to either an experimental group or the control group. All athletes will complete the sport motivation scale (Pelletier, et al, 1995), inspiration scale (Thrash & Elliot, 2003), need for relatedness scale (Richer & Vallerand, 1998), self assessment mannequin (Bradley, et al, 1992) and situational motivation scale (Guay, Vallerand, & Blanchard, 2000). Then athletes will be exposed to either the inspirational video clip or a control video clip of a coach giving instruction to athletes. The inspirational video clip is taken from the movie *Any Given Sunday* (Warner Bros, 1999), which is a movie (rated R) about professional football. In the movie there is a scene entitled the “Inches Speech” in which Al Pachino plays a coach giving a half-time speech to his players. The control stimulus is taken from the same movie, except Al Pachino is giving instruction and coaching the athletes. After watching the clips, the athletes will then complete the inspiration scale, relatedness scale, and situational motivation scale. Data collection will be done in classrooms at the universities participating. Rooms will be chosen with ample seating depending on the number of athletes that consent to participate, equipped with a computer, sound and a projector or a television that is large enough for participants to see. All participants will be administered the stimulus at the same time along with the measures. Classroom doors will be closed so that participants can participate in privacy.

Special Conditions:

Risk. Is there greater than minimal risk from physical, mental or social discomfort? Describe the risks and the steps taken to minimize them. Justify the risk undertaken by outlining any benefits that might result from the study, both on a participant and societal level. Even minor discomfort in answering questions on a survey may pose some risk to subjects. Carefully consider how the subjects will react and address ANY potential risks. Do not simply state that no risk exists. Carefully examine possible subject reactions. If risk is no greater than risk associated with daily life experiences state risk in these terms.

The video clips for both the experimental and control stimuli contain strong language that may offend some of the participants. The video clips are taken from a rated R movie, which are approved for audiences over the age of 17. All participants will be at least 18 years of age and risk should be minimal. Also, since participants will be watching the movie clips together and filling out the measures together, embarrassment is a possible risk as participants may feel a heightened level of self awareness in the presence of others.

Cover page checklist. Please provide additional information concerning risk elements checked on the cover page and not yet addressed in the narrative. If none, please state "none of the items listed on the cover page checklist apply." The [cover page](#) can be accessed from the IRB forms page. (Note – if a student, make sure your advisor has read your application and signed your cover page. (Your advisor is responsible for the research you undertake in the name of GSU.)

Reminder: No research can be undertaken until your proposal has been approved by the IRB.

Research Compliance IRB Cover Page

Georgia Southern University

For electronic submission: Your proposal narrative should already be completed and saved. Next complete cover page and “Save As” a word document to your computer or disk named “Coverpage_Year_Month_Date_lastname, First initial.doc”. Then open and complete **Informed Consent Checklist**. Email the entire package to IRB@georgiasouthern.edu. Original signature pages may follow by mail.

Application for Research Approval

<i>Investigator Information:</i>		
Name of Principal Investigator: Stephen P. Gonzalez	Email: stephengonzalez@gmail.com	For Office Use Only: Protocol ID: _____ Date Received:
Phone: 814-244-3094	Address: 17931 GA Hwy 67 South Apt. 1501 Statesboro, GA 30458	
Department: Health and Kinesiology		
Name(s) of Co-Investigators:	Title of Co-Investigator(s):	
Personnel and/or Institutions Outside of Georgia Southern University involved in this research: N/A		
<i>Project Information:</i>		
Title: An Examination of Coaching Behaviors in a Hollywood Movie		
Brief (less than 50 words) Project Summary: This study is designed to investigate whether inspiration can be experimentally manipulated using a simulated pep-talk given by a coach and if changes in inspiration are associated with changes in self-determined motivation.		
<i>Compliance Information:</i>		
<i>Please indicate which of the following will be used in your research:</i>		
<input checked="" type="checkbox"/> Human Subjects (Complete <i>Section A: Human Subjects</i> below) <input type="checkbox"/> Care and Use of Vertebrate Animals (Complete <i>Section B: Care and Use of Vertebrate Animals</i> below) <input type="checkbox"/> Biohazards (Complete <i>Section C: Biohazards</i> below)		
Section A: Human Subjects		
Number of Subjects: 114	Project Start Date: 12/10/2008 Project End Date: 12/10/2009 (no more than 1 year)	
*Date of IRB education completion: 08/26/2007 (attach copy of completion certificate)		
<i>Purpose of Research:</i>	<i>Please indicate if the following are included in the study:</i>	

<input checked="" type="checkbox"/> For use in thesis/dissertation <input type="checkbox"/> Completion of a class project <input type="checkbox"/> Publication (journal, book, etc.) <input type="checkbox"/> Poster/presentation to a scientific audience <input type="checkbox"/> Results will not be published <input type="checkbox"/> Other	<input checked="" type="checkbox"/> Informed Consent Document <input type="checkbox"/> Greater than minimal risk <input type="checkbox"/> Research Involving Minors <input type="checkbox"/> Deception <input checked="" type="checkbox"/> Generalizable knowledge (results are intended to be published) <input checked="" type="checkbox"/> Survey Research <input type="checkbox"/> At Risk Populations (prisoners, children, pregnant women, etc) <input type="checkbox"/> Video or Audio Tapes <input type="checkbox"/> Medical Procedures, including exercise, administering drugs/dietary supplements, and other procedures
Check one: <input checked="" type="checkbox"/> Student <input type="checkbox"/> Faculty/Staff <i>If student project please complete advisor's information below:</i>	
Advisor's Name: Jonathan N. Metzler	Advisor's E-mail: jmetzler@georgiasouthern.edu
Advisor's Phone: 912-478-5397	Advisor's Department: Health and Kinesiology P.O. Box: 8076
<i>Signature of Applicant(s): (PI, CoPI)</i> _____ Date: 12/9/2008 X	
<i>Signature of Advisor (if student) Department Chair(if faculty):</i> _____ Date: 12/9/2008 X	

Please submit this protocol to the Georgia Southern University Compliance Office, c/o The Office of Research Services & Sponsored Programs, P.O. Box 8005. The application should contain all required documents specific to the committee to which you are applying. Questions or comments can be directed to (912)478-5465 or IRB@georgiasouthern.edu