

Sports Education Management and Psychological Factors of Athlete Performance in China: Underpinning Theories

¹Wang Kun, ²Jacqueline Tham, ³Norhisham Mohamad

¹Wuxi Institute of Technology, China

²Management and Science University, Malaysia

³Management and Science University, Malaysia

Received: 21- June -2023

Revised: 27- July -2023

Accepted: 05- August -2023

ABSTRACT

This study examines into the intricate relationship between sports education management and the psychological factors influencing athlete performance in China. The exploration is grounded in psychological theories, focusing on emotions, theories of emotions, theories of anger, theories of stress, and the Lazarus Theory of psychological stress. The interplay of these elements not only shapes athlete performance but also underscores the need for comprehensive strategies within sports education management. As the foundation of the study, psychology, defined as the scientific examination of human and animal behavior, offers insights into the complexities of human performance. The distinction between overt and covert behaviors further underscores the importance of addressing internal cognitive processes alongside observable actions. Within this context, sports psychology emerges as a critical field, emphasizing the mental and emotional conditioning that accompanies physical training for optimal performance. Mental skills, encompassing abilities like concentration, goal-setting, imagery, relaxation, and self-talk, constitute a crucial aspect of sports psychology. These skills are integral to enhancing athlete performance and serve as the underpinning for effective psychological training. Moreover, psychological variables, encompassing cognitive features such as feelings and moods, exert a significant impact on an individual's attitude, behavior, and cognitive functions. This study advocates for the integration of psychological training within sports education management programs in China. By equipping coaches and athletes with an understanding of psychological factors and their consequences on performance, these programs can nurture well-rounded athletes. Emotion regulation techniques, drawing from mindfulness, deep breathing, and visualization, are pivotal tools that coaches and athletes should be adept at employing. Theories of emotions, such as the James-Lange theory and the Cannon-Bard theory, can deepen athletes' comprehension of emotional influences on both their physical and mental responses. Understanding theories of anger, stress, and the Lazarus Theory facilitates the development of effective coping strategies. Encouraging open communication about emotions like anger and providing tools for positive channeling can enhance athlete well-being without compromising performance. In conclusion, the fusion of sports education management and psychological theories, encompassing emotions and stress, holds the key to unlocking athlete potential in China. By integrating these components into athlete training and support, China can cultivate a holistic approach that optimizes performance and fosters a culture of excellence in sports.

Keywords: Sports Education Management, Psychological Factors, Athlete Performance, Emotions, Theories of Emotions, Theories of Anger, Theories of Stress, Lazarus Theory.

INTRODUCTION

At the very early stages, the study of soul is considered as psychology (Edirisinghe & Perera, 2005). It is further said that the word "psychology" derives from the Greek words called *psyche* and *logos* which denote 'soul' and 'study' respectively and stated that soul is extremely difficult to observe (Coon & Mitterer, 2016). Therefore, at present, psychology is defined as the scientific study of human and animal behavior (Coon, 1998). Behavior is anything an animal (including human) does that can be observed and measured. Behavior has two facets; overt and covert, where overt behaviors can be directly observed by others (such as sleeping, playing games, and eating). Covert behaviors are private and internal activities which can only observed directly by the individual so behaving (such as thinking and feeling) (Coon & Mitterer, 2016).

Psychology can be divided into two primary branches: pure and applied psychology, each with distinct intentions and perspectives. Pure psychology primarily seeks to enhance and expand human knowledge in the field. Its main goal is to advance our understanding of various psychological phenomena and principles. This branch of psychology is driven by a perspective of objectivity and the pursuit of universal validity. Pure psychology aims to uncover fundamental truths and principles that apply broadly to human behavior and cognition.

On the other hand, applied psychology is focused on utilizing psychological knowledge to improve and enhance various aspects of human life and behavior. Its intention is not solely to increase knowledge but to make practical, real-world applications of psychological principles. Applied psychology takes a subjective approach, addressing specific issues, challenges, and conditions that individuals or communities may face. It aims to provide practical solutions and interventions to improve the quality of life and conduct.

The scope of pure psychology is based on the inherent similarities found in various facets of knowledge within the field. It seeks to identify overarching principles and patterns that apply universally. In contrast, the scope of applied psychology is determined by the inherent frequency and prevalence of the factors that contribute to specific real-world events and situations. Applied psychology tailors its approaches to addressing the unique needs and circumstances of specific cases.

Also, pure psychology focuses on advancing knowledge and understanding of psychological phenomena with a universal perspective, while applied psychology seeks to use this knowledge to address practical issues and improve the conditions of human life with a particular and subjective focus. Both branches play essential roles in the field of psychology, contributing to its growth and application in various aspects of society. Sports psychology is referred to the study of the behavioral dimensions of sports performance (Coon, 1998, p. 723). According to Coon, majority of athletes quickly learn the importance of mental and emotional conditioning than physical training for betterment of sports performance (p.723). Therefore, there arises a necessity to analyze the most prominent psychological variables affecting player performance.

As mentioned above, the definitions of psychology basically discuss the study of behavior and many of the psychological factors are incorporated with mental skills. A skill is a combination of ability knowledge and experience that enables a person to do something well (Boyatzis & Kilb, 1995).

Furthermore, mental skills, often referred to as cognitive or psychological skills, encompass a set of trainable mental abilities and techniques that are considered essential for achieving successful learning and performance in various domains. These skills play a fundamental role in enhancing an individual's ability to excel in their endeavors. These mental skills are considered essential for individuals in various fields, including sports, academics, business, and everyday life. They can be cultivated and improved through training and practice. Mental skills training programs are designed to help individuals enhance their cognitive and psychological abilities to optimize their performance and achieve their goals.

In summary, mental skills encompass a range of trainable cognitive and psychological abilities that support successful learning and performance. These skills, such as concentration, goal-setting, imagery, relaxation, and self-talk, are valuable tools for individuals looking to excel in their chosen endeavors. Also, psychological variables are personal to the individual which are linked with mental feelings. Further it can be elaborated as the factors represent the cognitive features such as feelings, moods and many others that affect the attitude, behavior, and functions of the human mind.

LITERATURE REVIEW

Many elements including personality, stress, anxiety, arousal, self-confidence, and goal setting (Weinberg & Gould, 2015) are considered as important psychological factors which affect performance.

Table 1 depicts the previous findings relating to psychological factors affecting team players. It is a summary table of Table 1 and factors such as emotions, self-talk, spirituality, motivation, self-efficacy, and goal orientation are identified as important variables.

Table 1: Previous findings relating to psychological factors affecting team players.

| Reference | Relationship of Explanatory (Potential) variables to team players performance | | | | | |
|--|---|--------------|---------------|------------------|-----------|------------|
| | Emotion | Spirituality | Self-Efficacy | Goal Orientation | Self-talk | Motivation |
| Kempton (2016) | √ | | | | | |
| (Mottaghi, Atarodi, & Rohani, 2013) | √ | | | | | |
| (Gould, Diffenbach, & Moffett, Psychological characteristics and their development in Olympic champions, 2002) | √ | | | √ | | |

| | | | | |
|--|---|---|---|---|
| (Morgan, 1985) | √ | | | |
| Brown & Fletcher (2017) | | Importance of psychological variables on performance based on a meta-analysis | | |
| (Hatzigeorgiadis, Galanis, Zourbanos, & Theodorakis, 2014) | | | | √ |
| (Landin & Hebert, 1999) | | | | √ |
| (Feltz, Short, & Sullivan, Self efficacy in sport, 2008) | | | √ | |
| (Rastgar, Zarei, Davoudi, & Farlash, 2012) | √ | | | |
| (Petchsawanga & Duchon, 2012) | √ | | | |
| (Beauchamp, Haliwell, Fournier, & Koestner, 1996) | | | | √ |
| (Valle & Cabanach, 2003) | | | √ | |

As mentioned in Table 1 researchers have found a variety of psychological factors which impact on performance. The following sections compliment the discussion of psychological variables specifically affecting sports performance.

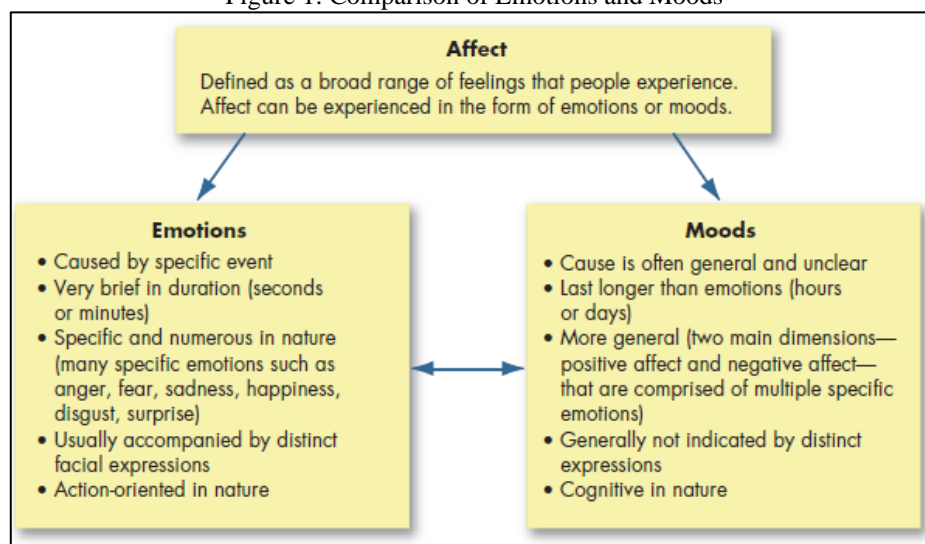
Emotions

Emotion refers to a state characterized by physiological arousal, subjective feelings, changes in facial expression, and adoptive behaviors (Coon & Mitterer, 2016; Coon, 1998). Generally, there are positive and negative emotions that affect the behavior of a person.

There are a range of emotions which has been witnessed in sport, comprising anxiety, frustration, disappointment, happiness, hope, and anger (Woodman, Davis, Hardy, Callow, Glasscock, & Yuill-Proctor, 2009). Therefore, the previous research in sport psychology has concentrated broadly on measuring emotions with the intention of describe them and divulge their antecedents and significances (Latinjak & Girona, 2012). According to literature, the measures of emotions comprise of both individualized and group oriented phenomena (Hanin, 2000). Findings of research suggest that positive and negative emotions may have effects on performance (Latinjak & Girona, 2012; Pervez, 2010).

Affect is a common term that covers a wide range of feelings that individuals experience and is considered as an umbrella concept which includes wide range of feelings (George, 1995), including emotions and moods. Emotions are defined as “intense feelings that are directed at someone or something” (Frijda, 1993). Consequently, moods are feelings which are considered as less intense when compared with emotions (Weiss & Cropanzano, Affective event theory: A theoretical discussion of the structure, causes and consequences of affective experience at work, 1996). The comparison of Emotions and moods are exhibited in Figure 1.

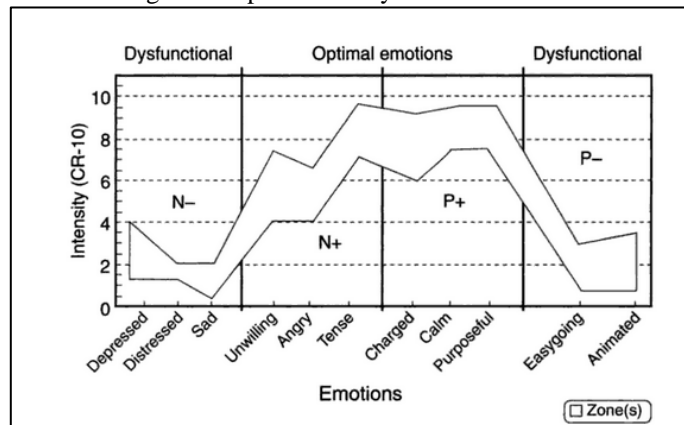
Figure 1: Comparison of Emotions and Moods



According to the author of above Figure 1, emotions are most of the time caused by a particular event. When compared with moods, emotions are more apt to be visibly exposed with facial jargons and expressions (anger, disgust) and hence additional action oriented (Hume, 2012).

Positive and negative affect scale (PNA) identifies both negative and positive emotions which lead to optimal and dysfunctional performance (Hanin, 2000). Intensity of emotions is drawn from Category Ratio (CR-10) scale as cited in Hanin (2000) (Borg, 1982) is exhibited in Figure 2.

Figure 2: Optimal and dysfunctional zones



Source: Adopted from, Y.L Hanin, Emotions in Sport, 2000 (p.80)

According to Figure 2, “N” denotes the negative affect and “P” denotes the positive affects. Eventhough it is said that optimal emotions are vital conjecturers of performance, the negative properties of dysfunctional emotions should also be considered to assure higher performance (Hanin, 2000).

Theories of Emotions

Analysis of literature reveals several theories of emotions. The main theory of emotion which the current study is concentrating on is the affective event theory of emotions. This section additionally provides a summary of emotion theories which discusses individual emotion traits.

Affective event theory of Emotions

The Affective Events Theory (AET) is a comprehensive model developed by organizational psychologists Howard Weiss and Russell Cropanzano, aimed at understanding the influence of emotions and moods on job performance and job satisfaction within the organizational context. AET provides valuable insights into how emotional experiences in the workplace can have a significant impact on employees’ attitudes and behaviors.

At its core, AET emphasizes the critical role that emotions play in shaping employees’ reactions and responses to various events and incidents that occur in their work environment. These emotional experiences can range from positive events or “uplifts” to negative events or “hassles.” The theory recognizes that these emotional incidents are distinguishable and can lead to lasting internal changes in employees, including shifts in their cognition, emotional states, and mental well-being.

AET’s strength lies in its ability to explain the intricate interplay between emotions, moods, and workplace events and their subsequent impact on job-related outcomes. By recognizing the importance of emotions in shaping behavior and attitudes, organizations can better understand and manage the well-being and performance of their employees.

Also, Affective Events Theory (AET) provides a valuable framework for comprehending how emotions and moods, arising from workplace events, affect job performance, job satisfaction, and organizational commitment. By acknowledging the role of emotions in the workplace, organizations can proactively create environments that promote positive emotional experiences, ultimately enhancing employee well-being and overall organizational success.

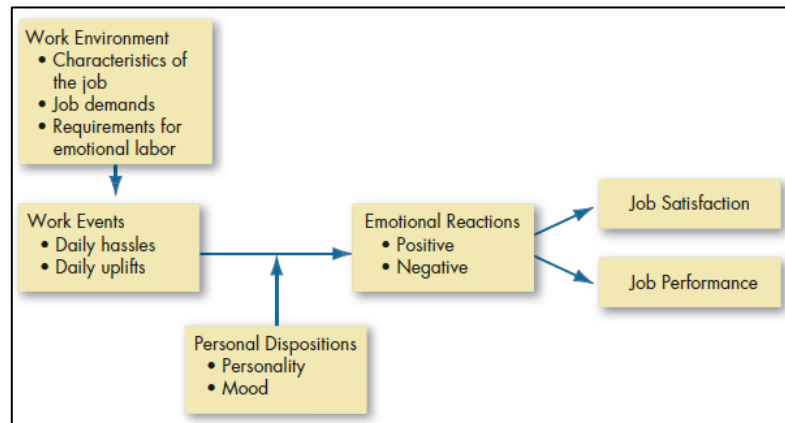


Figure 3: A framework of the outcome of Affective event theory of Emotions

The affective event theory model illustrates that workers respond emotionally to events/things that happen to them during work and that this response impacts their job satisfaction and performance.

Summary of Emotion theories

Table 2 depicts the summary of emotion theories in relation.

Table 2 Summary of Emotion theories

| Theory / Law | Source | Description |
|--|-----------------------------|--|
| Yerkes-Dodson Law (1908) | (Yerkes & Dodson, 1908) | A certain extent of anxiety can boost performance while too much can damage and impair performance. |
| James-Lange Theory (1885) | (James, 1884) | It is said that emotions are followed by physiological reaction / bodily reactions and do not follow immediately at the perception of event. |
| Cannon-Bard theory (emergency theory) | (Cannon, 1927) | People feel emotions and absorb stimulus the thalamus activates at that time and sends messages (Simultaneous) to cerebral cortex which result in identification of emotion, and to sympathetic nervous system which result in bodily changes such as tension, sweating, and trembling of muscle. |
| Schachter-Singer theory (1962) Two Factor Theory of emotion | (Schachter & Wheeler, 1962) | According to the theory, emotions are the outcomes of both thoughts and physical arousal as the result of a cognitive and biological process. The theory further proposed that the physiological arousal occurs first, and then the individual must identify the reason for this arousal to experience and label it as an emotion. |
| R.Plutchik's classification of emotions (1980) | (Blount, 1984) | Introduced eight emotions which are primary in nature namely; Aware, joy, accepted, anger, fear, rejected, sad, and surprise |
| Paul Ekman's Findings (2004) | (Ekman, 1993) | His findings on expressions are considered to be universally accepted, and the expressions includes anger, fear, disgust, sadness, joy, and surprise |
| Richard Lazarus theory (1994) | (Lazarus, 1994) | The theory describes that emotions (including physiological arousal) occurred after thoughts. |
| | | <div style="display: flex; align-items: center; justify-content: center;"> <div style="margin-right: 10px;">Event</div> <div style="margin-right: 10px;">→</div> <div style="margin-right: 10px;">Thought</div> <div style="margin-right: 10px;">→</div> <div style="display: flex; flex-direction: column; align-items: center;"> <div>→ Emotion</div> <div>→ Arousal</div> </div> </div> |

Source: Author developed based on the Emotion theories

The study of emotions in the context of sports has predominantly focused on the influence of negative emotions, such as anger, stress, and anxiety, on competitive performance (Cerin, 2003). Several factors contribute to this emphasis on negative emotions within sports psychology.

Firstly, the historical development of psychology, including sports psychology, had a primary focus on understanding and addressing psychological and mental illnesses. This therapeutic orientation inadvertently led to a greater emphasis on studying negative emotions, as these were often associated with mental health issues. Consequently, the research attention tended to shift away from exploring the role of positive emotions in enhancing psychological well-being and athletic performance (Myers & Diener, 1995).

Secondly, the prevailing theoretical models within both psychology and sports psychology, such as Yerkes and Dodson's inverted-U theory and Hull's drive theory, were primarily designed to examine the relationship between anxiety and performance (Hanin, 2000). These theories laid the foundation for understanding the impact of negative emotions on performance, particularly in stressful or competitive situations. As a result, researchers were constrained by these dominant models, which limited their exploration of other emotions.

The consequence of these historical and theoretical factors was that emotions like anger, stress, and anxiety received more attention in sports psychology research, while positive emotions were relatively understudied. However, this focus on negative emotions provided valuable insights into how adverse emotional states could impact athletic performance.

In recent years, there has been a growing recognition of the importance of positive emotions in sports psychology. Researchers have begun to explore how positive emotions, such as happiness, excitement, and joy, can enhance performance, motivation, and overall well-being among athletes (McCarthy, 2011). This shift in focus has broadened our understanding of the complex interplay between emotions and sports performance, highlighting that both negative and positive emotions play significant roles in athletes' experiences.

The historical orientation of psychology, coupled with dominant theoretical models, has contributed to the predominant emphasis on negative emotions in sports psychology research. However, contemporary studies are increasingly acknowledging the relevance of positive emotions, providing a more comprehensive understanding of how emotions influence athletic performance and psychological well-being in sports contexts.

a) Negative emotions

Negative emotion is usually an unpleasant or unhappy emotion which is evoked in individuals to express a negative affect towards an event or person (psychologydictionary.org). Many scholars consider anger, stress and anxiety as the prominent negative emotions (Cerin, 2003; Cerin, Szabo, Hunt, & Williams, 2000) and dejection is also considered as another important affective state (Jones, Lane, Uphill, & Catlin, 2005).

1) Anger and Aggression

Anger, as one of the primary emotions, is recognized as a significant precursor to aggressive behavior in the field of psychology (Robazza & Bortoli, 2007). This intense emotional state can vary in intensity, ranging from mild annoyance to extreme fury or rage, and it is accompanied by physiological changes in the autonomic nervous system (Spielberger, 1991).

Furthermore, anger can be defined as a negative and phenomenological feeling state that serves as a motivational force for actions. These actions are often directed against others and can involve behaviors intended to warn, intimidate, control, attack, or seek retribution (Kassinove & Tafrate, 2006). It is important to note that anger is more than just an internal emotional state; it motivates individuals to engage in specific actions.

In the domain of social psychology, aggression is generally characterized as any behavior deliberately intended to cause harm to another individual who does not wish to be harmed (Baron & Richardson, 1994). Unlike emotions, aggression represents external, observable behaviors rather than internal states of feeling. It is the tangible expression of emotions like anger, driven by the desire to harm or retaliate against others.

In summary, anger is a powerful emotion that can range from mild irritation to intense rage, and it is often accompanied by physiological changes. This emotional state serves as a motivator for actions, including aggression, which involves behaviors aimed at causing harm to others. While anger is an internal emotional experience, aggression is the external manifestation of this emotion through intentional harmful actions. Understanding the relationship between anger and aggression is crucial in various fields of psychology, particularly in the study of human behavior and its social consequences.

Theories of Anger

The most important theories of anger are discussed below.

The Recalibration Theory of Anger

The fundamental function is to solve encountered conflict in accord of the aggressor and to achieve the maximum promising welfare from other persons by forcing / coercing them with aggression (Sell.A & Cosmides, 2009).

Spielberger's State-Trait Theory of Anger

The state-trait theory of anger, as proposed by Spielberger, Jacobs, Russell, and Crane in 1983, is a significant framework for understanding anger as a complex emotional phenomenon. This theory posits that anger can be divided into two fundamental components: state anger and trait anger.

State Anger: State anger refers to the transient and temporary experience of anger. It involves subjective feelings of anger, which can vary in intensity and duration. For example, someone may experience a momentary feeling of irritation when stuck in traffic, which subsides once the traffic clears. State anger is associated with physiological reactions that increase in intensity as the subjective feelings of anger escalate. These physiological reactions can include increased heart rate, elevated blood pressure, and heightened arousal.

Trait Anger: Trait anger, on the other hand, represents an individual's characteristic or enduring disposition toward anger. It is a relatively stable aspect of a person's personality. Individuals with high trait anger are more predisposed to experience anger across various situations, and their anger reactions tend to be more intense, prolonged, and easily triggered compared to those with low trait anger. Essentially, individuals with high trait anger have a greater baseline tendency to become angry and to sustain that anger over time.

The state-trait theory of anger suggests an interplay between these two components. Individuals with high trait anger are more likely to experience state anger in response to anger-inducing situations in their environment. Their state anger is not only more intense but also more enduring compared to individuals with low trait anger. In contrast, those with low trait anger may experience state anger less frequently, and when they do, it is typically less intense and shorter in duration.

This theory helps us understand that anger is a complex emotion influenced by both situational factors (state anger) and individual differences (trait anger). It highlights that some people are inherently more prone to anger, while others are more temperamentally even-tempered. Understanding the interplay between state and trait anger is valuable for psychologists and researchers studying anger, as well as for individuals seeking to manage and regulate their own anger responses.

Empirical reviews of the impact of anger on performance

The following table depicts the empirical findings of the impact of anger on performance. There are positive and negative impacts persisting with anger on performance. Anger is considered as an unpleasant emotion (Jones, Lane, Uphill, & Catlin, 2005).

Table 3 Empirical findings on the relationship between Anger and Performance

| Relationship | Findings | Reference Article |
|--|---|--|
| Negative impact between anger and success | Negative impact of anger on success | (Gezelsofloo, Parsian, Choorli, & Feizi, 2013; Steffgen, 2017) |
| Positive impact of anger on performance | Anger experience as facilitating the sports performance | (Ruiz & Hanin, 2011) |
| Anger does not create any significant differences in performances | Anger does not create any significant differences in Achievement performances | (Sofia & Cruz, 2017) |

Source: Author Developed based on Literature, 2019

The impact of anger on athletic performance is a complex and multifaceted topic, and research findings can sometimes appear contradictory. Gezesofloo et al. (2013) and their study aimed to investigate the influence of pre-competition anger on the self-confidence and success of volleyball players in a premier league. The findings from this study suggested that both anger and self-confidence had a significant impact on the success of the players. It implies that in this specific context, experiencing anger before a competition may have increased self-confidence, which in turn contributed to better performance. This study highlights the idea that emotions like anger can sometimes be channeled positively to enhance an athlete's mental state and, subsequently, their performance.

In contrast, the study conducted by Ruiz and Hanin (2011) reported that 75% of athletes perceived their anger experiences as facilitating their performance. This suggests that some athletes believe that anger can have a positive influence on their performance. It is important to note that this study focuses on athletes' perceptions of anger's impact, and these perceptions can vary widely among individuals. What one athlete perceives as facilitating their performance, another might see as hindering it.

These differing findings underscore the complexity of the relationship between anger and sports performance. Several factors can contribute to this complexity, including individual differences, the specific sport being played, and the athlete's ability to manage and channel their emotions effectively.

It is also worth mentioning that emotions like anger are not universally detrimental to performance. In some situations, they might provide an athlete with a competitive edge or a burst of energy and focus. However, excessive, or uncontrolled anger can lead to negative outcomes, such as impaired decision-making, loss of concentration, and even aggressive behavior.

Overall, the impact of anger on sports performance is highly context-dependent and varies from athlete to athlete. Researchers continue to explore this relationship to gain a deeper understanding of how emotions influence athletic outcomes.

2) Stress as a negative emotion

Stress is an element of everyday life a closely related antecedent of anxiety. Stress is defined as “a considerable imbalance between demand (physical and/or psychological) and response capability, under conditions where failure to meet that demand has important consequences” (McGrath, 1970). If a person feels incapable of satisfying the demands and the prospects, it is said that the person gets stressed (Weinberg & Gould, 2007). Accordingly, McGrath in his book pointed out that stress consisted of consistent stages; environmental demand, perception of demand, stress response, and behavioral consequences which incorporate a cyclical effect. (Weinberg & Gould, 2007).

Table 4: Four interrelated stages of stress

| Environmental Demand | Perception Demand | Stress Response | Behavioral response |
|--|---|---|--|
| Demand is either physical or psychological | How athlete see or perceive such demand | Athlete reaction either physically or psychologically. Reaction can be fear, worry, and enhanced physical activation. | Actual behavior of the athlete under stress. (Either improved or deteriorated performance) |

Source: Author developed based on (Weinberg & Gould, 2007, pp. 82-83)

Stress is a concept which is widely used in health sciences. In the evolution from physics to the behavioral sciences, the practice of the term stress rehabilitated. It now designates as bodily processes created by conditions of physical or psychological demands of a person (Selye, 1976). Stressors are the external factors that impose on the body (McGrath, 1982).

Theories of Stress

There are many theories cited in organizational context and the most prominent theories which are considered under the present study are the Systematic Stress: Selye’s General Adoption Syndrome (GAS), and the Lazarus Theory.

Systematic Stress: Selye’s General Adoption Syndrome (GAS)

This theory is introduced by Hans Selye who is considered as the father of the stress research. This is noted as a response-based model of stress. According to him stress is a nonspecific response demand made upon the body. It further postulated that the body has normal level of resistance to stress (Selye, 1976). GAS process includes three phrases where the first stage is the “initial alarm” or else the “shock stage”. There is an insignificant reduction in the resistance to stress at the alarm stage. Resistance rapidly drops during the second stage which is known as “resistance stage”. At the exhaustion stage, there arises the disease (Selye, 1976).

Psychological Stress: The Lazarus Theory

There are two concepts are dominant to whichever psychological stress theory namely appraisal and coping. Appraisal means the assessment of the implication to the individual well-being, and coping reflects the individuals’ made in order to manage specific demands (Lazarus R. , 1993). Lazarus stress theory has submitted to several critical revisions (Lazarus R. , 1991). In the revised theory, stress is regarded as a relationship between individuals and the environment they live (Lazarus R. , 1991).

The two processes which are vital mediators between the relation of the individual and the environment transaction are coping and cognitive appraisal (Lazarus R. , 1993).

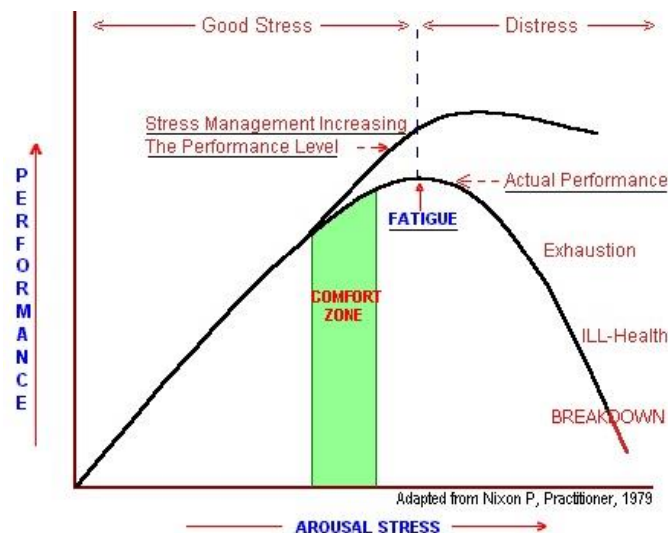
Coping is closely related to the conception of cognitive appraisal and, therefore, to the transaction between the stress relevant person and environment.

Coping is defined as “the cognitive and behavioral efforts made to master, tolerate, or reduce external and internal demands and conflicts among them” (Folkman & Lazarus, 1980).

The Stress Response Curve

There is a relationship between stress and performance which is depicted from Figure 4. The curve explains pattern of which the stress affects performance in theoretical terms.

Figure 4: Stress and performance curve/Stress response curve



Source: The Stress Response Curve by Nixon (1979) retrieved from www.explorale.com (Sincero, 2012)

According to the above Figure 4, when the stress increases, it leads to increased performance level. The Comfort Zone (CZ) indicates the range of stress levels that a person can completely manage which enables good performance stages (Sincero, 2012). The eventual level of overwhelming stress is named as burnout, which leads to exhaustion, breakdown, or ill-health (Sincero, 2012).

Empirical reviews of the impact of stress on performance

The empirical finding relating to stress on performance mostly can be captured from organizational setting. The main reason behind this is the usage of the questionnaires of POMS (profile of mood states- (McNair, Lorr, & Droppleman, 1971)) and SEQ (sport emotion questionnaire- (Jones, Lane, Uphill, & Catlin, 2005)) which does not consider stress as a negative emotion state. The present study considers stress as a negative emotional state as per the findings of Cerin, (2019) and Cerin, Szabo, Hunt, & Williams (2000).

Table 5 Empirical findings on the relationship between stress and Performance

| Findings | Consistent with |
|--|--|
| High job stress leads to low job performance – Negative relationship (organizational Domain) | (Long, Selby, & Calhoun, 1980) (Jamal, 1984); (Leveck & Jones, 1996); (Motowidlo, Manning, & Pakard, 1986); (Westman & Eden, 1996) (Leung, Olomolaiye, Chong, & Lam, 2005) (Ashfaq & Ramzan, 2013), (Nyangahu & Bula, 2015) (Kleine, Sampedro, & Melo, 2007) |
| High job stress leads to high job performance – Positive Relationship | (Keijsers, Schaufeli, LeBlanc, Zwerts, & Miranda, 1995) |

people with moderate stress perform better than do those with high or low levels of stress (Anderson, 1976); (Cohen, 1980)

Excessive Stress leads to low performance in sports (Singh R. , 2017; Hamlin, Wilkes, Elliot, Lizamore, & Kathiravel, 2019)

Source: Author Developed based on Literature, 2019

FINDINGS AND DISCUSSIONS

The concept of performance has garnered considerable attention from researchers, prompting the need to examine into its nuances and establish clear differentiations between behavioral actions and the outcomes that stem from those actions. This conceptualization has been essential in understanding the multifaceted nature of performance, where both the execution of actions and the subsequent results play pivotal roles.

Scholars recognize the significance of distinguishing between behavioral actions and the outcomes of performance. In this regard, Campbell (1990) highlights the necessity to differentiate between the act of performing, which emphasizes the behavior exhibited through actions, and the outcome of performance, which encompasses the results derived from those actions. This distinction is fundamental in comprehending the complexity of performance and its multi-dimensional impact.

In the context of organizations, the definition of performance takes on a specific focus. Campbell, McCloy, Oppler, and Sager (1993) propose a comprehensive perspective by defining performance as the collective embodiment of what an organization employs an individual to accomplish, and to accomplish well. This definition underscores the organization's expectations for its employees to not only engage in actions related to their roles but also to achieve those actions proficiently. It aligns with the view that performance is not limited to the mere execution of tasks but also encompasses the quality, effectiveness, and efficiency of those tasks.

Furthermore, the concept of performance extends beyond the context of action and results; it examines into the context of judgment and evaluation. Motowidlo, Borman, and Schmit (1997) highlight that performance is not just about carrying out tasks or achieving goals; it also encompasses the intricate processes of judgment and evaluation. In this sense, performance involves not only engaging in actions but also subjecting those actions to assessment and evaluation based on predefined criteria or standards. This evaluative dimension of performance is integral in determining the effectiveness and value of an individual's contributions within a particular context.

The multifaceted nature of performance, comprising behavioral actions, outcomes, and evaluative processes, demonstrates its complexity in various settings. Whether in organizational contexts or other domains, performance is characterized by a dynamic interplay between action and result, shaped by the context's expectations and assessment criteria.

To synthesize, the concept of performance embodies more than just the execution of actions; it encompasses the entire journey from action to outcome, underpinned by evaluative processes. Campbell's distinction between action and outcome, along with the organizational definition of performance, emphasizes the need for individuals not only to engage in actions but to excel in those actions. Motowidlo et al.'s perspective emphasizes the evaluative lens through which performance is measured, acknowledging that it is not only about what one does but how well one does it. This multifaceted conceptualization of performance provides a comprehensive foundation for exploring the psychological factors influencing athletes' performance in team events, as it acknowledges the interplay between actions, outcomes, and evaluative processes in determining success.

CONCLUSION AND IMPLICATIONS

The concept of performance can be approached from two distinct perspectives: task performance and contextual performance, as delineated by Borman (1997). These perspectives offer different insights into the various dimensions of performance, shedding light on the nuanced aspects of an individual's contributions within a specific setting.

Task performance and contextual performance differ in their underlying assumptions. Firstly, activities related to contextual performance tend to have similarities across various jobs, while they vary considerably between jobs in the context of task performance. Secondly, personality traits and motivation play a pivotal role in influencing contextual performance, whereas task performance is predominantly influenced by an individual's ability. Lastly, task performance is characterized by specific and prescribed role behaviors, while contextual performance grants individuals more flexibility in their discretionary actions.

Performance assessment is typically categorized into two types: subjective and objective measures (Frederiksen, Lange, & Kriechel, 2012). These measurement terms are commonly discussed in organizational contexts. Subjective measures involve evaluating a company's performance based on a scale ranging from "very poor" to

“very good” or in comparison to competitors. On the other hand, objective measures entail quantifiable metrics such as percentage of sales growth or profitability.

The availability of objective measures becomes limited in scenarios where employees perform multiple tasks in dynamic environments, work collaboratively in teams, or their actions have a significant impact on the firm’s value. In such cases, administrators often resort to subjective evaluations of employee performance (Jaworski & Kohli, 1993). The coexistence of these two measures prompts the need to compare results obtained from both measures for a single subject, a perspective well-explored in organizational contexts.

Research conducted on 222 business units within US corporations and 230 managers revealed an interesting insight. The study demonstrated a positive association between subjective measures (overall performance) and market orientation, whereas no such association was found for objective measures (market share) in the context of market orientation and performance (Jaworski & Kohli, 1993).

In the domain of athlete performance evaluation, two distinct approaches are commonly employed: perceived performance and performance outcome. Both methods have their proponents and detractors (Smith, 2004). Within social and organizational psychology literature, self-report measures have garnered attention (Carron, Colman, Wheeler, & Steevens, 2002). The debate surrounding the use of self-reported performance versus actual performance measures continues, with some scholars advocating for the incorporation of both methodologies (Apple, 1993).

Furthermore, the dichotomy between task and contextual performance underscores the multidimensional nature of individual contributions. Similarly, the distinction between subjective and objective performance measures provides insight into the challenges and intricacies of evaluating performance in diverse contexts. These concepts have direct relevance in various domains, including organizational management and sports, as they influence how individuals are assessed and recognized for their achievements.

Also, it is recommended that sports education management programs in China incorporate psychological training as an integral component. Coaches and athletes should be educated about the various psychological factors, their impact on performance, and strategies to manage them effectively.

Given the profound role of emotions in athlete performance, coaches and athletes should be trained in emotion regulation techniques. Techniques such as mindfulness, deep breathing, and visualization can help athletes manage their emotions and maintain optimal performance states during competitions.

Incorporating theories of emotions, such as the James-Lange theory and the Cannon-Bard theory, into sports education can provide athletes with a deeper understanding of how emotions influence their physical and psychological responses. This knowledge can empower athletes to interpret their emotional experiences in a constructive manner.

Understanding the Theories of Anger, such as the Catharsis Theory and the Appraisal Theory, can aid athletes in recognizing the sources of their anger and developing strategies to channel it positively. Coaches can foster environments that encourage open communication about emotions like anger and provide tools to manage them without compromising performance.

Integrating Theories of Stress, including the Transactional Model of Stress and Coping proposed by Lazarus and Folkman, can equip athletes with a framework to perceive stressors as challenges rather than threats. Sports education programs can teach athletes how to appraise stressors and implement effective coping strategies.

The Lazarus Theory emphasizes the significance of cognitive appraisal in shaping stress responses. Integrating this theory into sports education can enable athletes to reframe stressors in ways that promote adaptive responses. Coaches can guide athletes in developing positive self-talk and cognitive restructuring techniques.

Sports education management should take a holistic approach to athlete support, addressing not only physical training but also psychological well-being. Providing access to sports psychologists and mental health professionals can ensure that athletes have the resources they need to manage emotions, stress, and performance-related challenges.

Recognize that athletes have unique psychological profiles and responses. Tailoring psychological training to individual needs and preferences will be more effective in enhancing performance and well-being. Emphasize the long-term development of psychological skills. Just like physical training, psychological skills need consistent practice and refinement to yield significant improvements in athlete performance.

Continuously assess the effectiveness of integrated psychological training methods in sports education management. Encourage research on the impact of psychological interventions on athlete performance to inform evidence-based practices.

In conclusion, the integration of psychological factors and relevant theories can significantly contribute to athlete performance and sports education management in China. By providing athletes and coaches with the tools to understand and manage emotions, stress, and other psychological factors, China can foster a culture of well-rounded athlete development and excellence in sports.

REFERENCES

1. Anderson, C. (1976). Coping behavior as intervening mechanisms in the inverted U-Stress performance relationship. *Journal of applied psychology* , 54, 42-9.
2. Apple, K. (1993). The antecedents and the consequences of multidimensional cohesion throughout a intercollegiate baseball season. *Unpublished Masters thesis* . West Lafayette, IN: Purdue University.
3. Ashfaq, A., & Ramzan, M. (2013). Effects of Work stress on Employees Job Performance :A Study on Banking Sector of Pakistan. *Journal of Business Management* , 11 (6), 61-8.
4. Baron, R. A., & Richardson, D. (1994). *Human aggression* (2nd ed.). New York: Plenum.
5. Beauchamp, P., Halliwell, W., Fournier, J., & Koestner, R. (1996). Effects of Cognitive-Behavioral Psychological Skills Training on the Motivation, Preparation, and Putting Performance of Novice Golfers. *The Sport Psychologist* , 10, 157-70.
6. Blount, B. (1984). The language of emotions: An ontogenetic perspective. *Language Sciences* , 6 (1), 129-56.
7. Borman, W. &. (1997). Task performance and contextual performance : The meaning for personnel selection research. *Human Performance* , 10, 99-109.
8. Boyatzis, R., & Kilb, D. (1995). From learning styles to learning skills: the executive skill profile. *Journal of Managerial psychology* , 10 (5), 3-17.
9. Brown, C. (2014, March). *American Psychological Association*. Retrieved December 30, 2016, from APA web site: <http://www.apa.org>
10. Campbell, J. P., McCloy, R., Oppler, S. H., & S. C. (1993). A theory of performance. In E. Schmitt, W. Borman, & Associates, *Personnel selection in organizations* (pp. 37-70). San Francisco:: Jossey-Bass.
11. Cannon, W. (1927). Cannon, W. B. (1927) The James-Lange theory of emotion: A critical examination and an alternative theory. *American Journal of Psychology* , 39, 110-24.
12. Carron, A., Colman, M., Wheeler, J., & Steevens, D. (2002). Cohesion and performance in sports: A meta analysis. *Journal of sports and exercise psychology* , 24, 168-88.
13. Cerin, E. (2019). Anxiety versus fundamental emotions as predictors of perceived functionality of pre-competitive emotional states, threat, and challenge in individual sports. *Journal of Applied Sport Psychology* , 15, 223-38.
14. Cerin, E., Szabo, A., Hunt, N., & Williams, C. (2000). Temporal patterning of competitive emotions: A critical review. *Journal of Sports Sciences* , 18, 605-26.
15. Coon, D. (1998). *Introduction to psychology* (8th ed.). USA: Books/Cole Publishing Company.
16. Coon, D., & Mitterer, J. (2016). *Introduction to Psychology: Gateways to Mind and Behavior*. Boston: Cengage Learning.
17. Craft, L., Magyar, T., Becker, B., & Feltz, D. (2019). The relationship between the Competitive State Anxiety Inventory-2 and sport performance: A meta-analysis. *Journal of Sport and Exercise Psychology* , 25, 45-65.
18. Creswell, J. (2011). *Research Design: Qualitative, Quantitative and Mixed Methods Approaches* (2nd ed.). Thousand Oaks, California: Sage Publications.
19. Cronbach, L. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika* , 16, 297-334.
20. Edirisinghe, D., & Xiao, G. (2005). *Psychological Analysis*. Dehiwala, Beijing, China : Wathma Publishers.
21. Feltz, D., Short, S., & Sullivan, P. (2008). Self efficacy in sport. *International Journal of Sports Science and Coaching* , 3, 293-295.
22. Feltz, D., Short, S., & Sullivan, P. (2008). Self efficacy in sport working with athletes, teams and coaches. *International Journal of Sports Science and Coaching* , 3, 293-295.
23. Folkman, S., & Lazarus, R. (1980). *Ways of Coping Questionnaire Research edition*. Palo Alto: Consulting Psychologists Press.
24. Frederiksen, A., Lange, F., & Kriechel, B. (2012). Subjective Performance Evaluation and Employee careers. *The Institute for the Study of Labor (IZA)* , 1-40.
25. Frijda, N. (1993). Moods, Emotion Episodes and Emotions. In N. Frijda, M. Lewis, & J. Haviland (Eds.), *Handbook of Emotions* (pp. 381–403). New York: Guilford Press.
26. Gezelsoff, H., Parsian, H., Choorli, A., & Feizi, M. (2013). The Impact of Pre-Competition Anger on Self-Confidence and Success of Volleyball Players in Premier League and its Relation with Athletes' Experience. *J. Educ. Manage. Stud* , 3 (3), 215-20.
27. Ghasemi, A., & Zahediasl, S. (2012). Normality Tests for Statistical Analysis: A Guide for Non-Statisticians. *International Journal of Endocrinology and Metabolism* , 10 (2), 486-89.
28. Gould, D., Greenleaf, C., Guinan, D., & Chung, Y. (2002(b)). A Survey of U.S. Olympic Coaches: Variables Perceived to Have Influenced Athlete Performances and Coach Effectiveness. *The Sport Psychologist* , 16, 229-50.

29. Hanin, Y. (2000). *Emotions in sport*. Champaign, IL: Human Kinetics.
30. Hatzigeorgiadis, A., Zourbanos, N., Mpoupaki, S., & Theodorakis, Y. (2009). Mechanisms underlying the self-talk-performance relationship: the effects of motivational self-talk on self-confidence and anxiety. *Psychology of Sport and Exercise* , 10, 186-92.
31. Hume, D. (2012). Emotions and moods. *Organizational Behavior* , 258-97.
32. Jamal, M. (1984). Job stress and job performance controversy: An empirical Assessment. *Organizational behavior and human performance* , 44, 601-19.
33. James, W. (1884). What is an emotion. *Mind* , 9, 188-205.
34. Jaworski, B., & Kohli, A. (1993). Market Orientation: Antecedents and consequences. *Journal of Marketing* , 57, 53-70.
35. Johnson, M. (2011). *Gold rush: What makes an Olympic champion?* London, UK: HarperSport.
36. Jones, M., Lane, A. B., Uphill, M., & Catlin, J. (2005). Development and validation of sports emotion questionnaire. *Journal of Sport and exercise psychology* , 27, 407-31.
37. Jones, M., Lane, A., Bray, S., & Uphill, M. C. (2005). Development and Validation of the Sports Emotion Questionnaire. *Journal of Sports & Exercise Psychology* , 27, 407-31.
38. Jones, M., Meijen, C., McCarthy, P., & Sheffield, D. (2009). A Theory of Challenge and Threat States in Athletes. *International Review of Sport and Exercise Psychology* 2(2):161-180 , 2 (2), 161-180.
39. Kassirer, H., & Tafrate, R. (2006). Anger-related disorders: Basic issues, models and diagnostic considerations. In E. Feindler, & E. Feindler (Ed.), *Anger-related disorders: A practitioner's guide to comparative treatments* (pp. 1-27). New York: Springer Publishing.
40. Keijsers, C., Schaufeli, W., LeBlanc, P., Zwerts, C., & Miranda, D. (1995). Performance and burnout in intensive care unit. *Work and stress* , 9, 513-27.
41. Landin, D., & Hebert, E. (1999). The influence of self-talk on the performance of skilled female tennis players. *Journal of Applied Sport Psychology* , 11, 263-282.
42. Latinjak, A., & Girona, U. (2012). The underlying structure of Emotions: A tri-dimensional model of core affect and emotion concepts for sports. *Revista Iberoamericana de Psicología del Ejercicio y el Deporte* , 7 (1), 71-87.
43. Lazarus, R. (1991). *Emotion and Adaptation*. New York: Oxford University Press.
44. Lazarus, R. (1993). Coping theory and research: Past, present, and future. *Psychosomatic Medicine* , 55, 234-47.
45. Lazarus, R. (1994). Psychological stress in the workplace. In R. Crandall, & P. Perrewe, *Occupational Stress: A Handbook* (Vol. 39, pp. 24-29). New York: Taylor and Francis.
46. Lazarus, R. (1999). *Stress and Emotion*. New York, NY: Springer.
47. Lazarus, R. (2000). How emotions influence performance in competitive sports. *The Sport Psychologist* , 14, 229-252.
48. Leveck, M., & Jones, C. (1996). The nursing practice environment, staff retention and quality of care. *Research in nursing and care* , 22 (3), 331-43.
49. Livingstone, C. (2008). *Dictionary of Sport and Exercise Science and Medicine*. Retrieved 05 18, 2017, from Dictionary of Sport and Exercise Science and Medicine web site: <http://medical-dictionary.thefreedictionary.com>
50. Long, G., Selby, J., & Calhoun, L. (1980). Effects of Situational Stress and Sex on Interpersonal Distance reference. *Preference, Journal of Psychology: Interdisciplinary and Applied* , 105 (2), 231-7.
51. McCarthy, P. (2011). Positive emotion in sport performance: current status and future directions. *International Review of Sport and Exercise Psychology* , 4 (1), 5-69.
52. McGrath, J. (1970). Major methodological issues. In J. McGrath, *Social and psychological factors in stress* (pp. 19-49). New York: Rinehart & Winston.
53. McGrath, J. (1982). Methodological problems in research on stress. In H. Krohne, & L. Laux, *Achievement, Stress, and Anxiety* (pp. 19-48). Washington, DC: Hemisphere.
54. McNair, D., Lorr, M., & Droppleman, L. (1971). *Profile of mood state manual*. San Diego: Educational and Industrial Testing service.
55. Morgan, W. (1985). Selected psychological factors limiting performance: A mental health model. *Limits of human performance* , 70-80.
56. Motowidlo, S., Borman, W., & Schmit, M. (1997). A theory of individual differences in task and contextual performance. *Human Performance* , 10, 71-83.
57. Mottaghi, M., Atarodi, A., & Rohani, Z. (2013). The relationship between coaches' and athletes' competitive anxiety, and their performance. *Iran J Psychiatry Behav Sci* , 7 (2), 68-76.
58. Myers, D., & Diener, E. (1995). Who is happy? *Psychological Science* , 6, 10-9.
59. Pervez, M. (2010). Impact of emotions on employees's job performance: An evidence of organizations in Pakistan. *OIDA International Journal of Sustainable Development* , 1 (5), 10-6.

60. Petchsawanga, P., & Duchon, D. (2012). Workplace Spirituality, Meditation, and Work performance. *Journal of Management, Spirituality & Religion* , 9 (2), 189- 208.
61. Rawland, D., & Lankveld, J. (2019). Anxiety and Performance in Sex, Sport, and Stage: Identifying Common Ground. *Front. Psychol.*
62. Ruiz, M., & Hanin, Y. (2011). Perceived impact of anger on performance of skilled karate athletes. *Psychology of Sport and Exercise* , 12, 242-9.
63. Schachter, S., & Wheeler, L. (1962). Epinephrine, chlorpromazine, and amusement. *Journal of Abnormal and Social Psychology* , 65, 121-28.
64. Seligman, M., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist* , 55, 5-14.
65. Selye, H. (1976). *The Stress of Life*. New York: McGraw-Hill.
66. Sincero, S. (2012, February 12). *Explorable.com*. Retrieved January 23, 2017, from Explorable.com web site: <https://explorable.com/how-does-stress-affect-performance>
67. Singh, R. (2017). Stress Role in Sports Performance of Athlete's. *International Journal of Physical Education, Sports and Health* , 4 (3), 278-280.
68. Sofia, R., & Cruz, J. (2017). Unveiling anger and aggression in sports: The effects of type of sport, competitive category and success level. *Journal of Sport Psychology* , 26 (2), 21-28.
69. Spielberger, C. (1991). *State-Trait Anger Expression Inventory (STAXI)*. Odessa, FL: Psychological Assessment Resources.
70. Spielberger, C., Jacobs, G., Russell, S., & Crane, R. (1983). Assessment of Anger: the State-Trait Anger Scale. In J. Butcher, & C. Spielberger (Ed.), *Advances in Personality Assessment* (Vol. 2). Hillsdale, NJ: Erlbaum.
71. Valle, A., & Cabanach, J. N. (2019). Multiple goals, motivation and academic learning. *British Journal of Educational Psychology* , 73, 71-87.
72. Weinberg, R. (1988). *The mental advantage: Developing your psychological skills in tennis*. Champaign, IL: Human Kinetics.
73. Weinberg, R. S., & Gould, D. (2019). *Foundations of sport and exercise psychology*. Champaign, IL: Human Kinetics.
74. Weinberg, R. S., Smith, J., Jackson, A., & Gould, D. (1984). Effect of association, dissociation, and positive self-talk strategies on endurance performance. *Canadian Journal of Applied Sport Sciences* , 9, 25-32.
75. Weiss, H., & Cropanzano, R. (1996). Affective event theory: A theoretical discussion of the structure, causes and consequences of affective experience at work. In B. Staw, & L. Cummings, *Research in organizational behavior* (Vol. 18, pp. 17-19). Greenwich, CT: JAI Press.
76. Weiss, H., & Cropanzano, R. (1996). *Research in Organizational behavior* (Vol. 18). (B. Staw, & L. Cummings, Eds.) London, England: Jai Press Inc.
77. Weiss, H., & Cropanzano, R. (1996). Research in organizational behavior: An annual series of analytical essays and critical reviews. In B. Staw, L. Cummings, H. Weiss, & R. Cropanzano (Eds.), *Affective Events Theory: A theoretical discussion of the structure, causes and consequences of affective experiences at work*. (Vol. 18, pp. 1-174). US: Elsevier Science, JAI Press.
78. Westman, M., & Eden, D. (1996). The inverted U relational between stress and performance: A field Study. *Work and Stress* , 10, 165-73.
79. Yerkes, R., & Dodson, J. (1908). The Relation Of Strength Of Stimulus To Rapidity Of Habit-Formation. *Journal of Comparative Neurology and Psychology* , 18, 459-82.