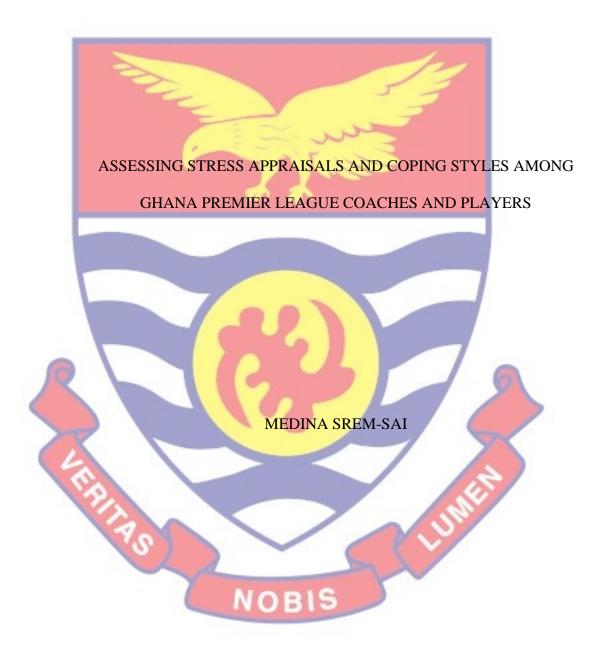
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# ASSESSING STRESS APPRAISALS AND COPING STYLES AMONG GHANA PREMIER LEAGUE COACHES AND PLAYERS

BY

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Thesis submitted to the Department of Health, Physical Education and Recreation (HPER) of the Faculty of Science and Technology Education, College of Education Studies, University of Cape Coast, in partial fulfillment of the requirements for the award of Doctor of Philosophy degree in Physical Education (Sports Psychology).

DECEMBER 2021

## **DECLARATION**

## **Candidate's Declaration**

I hereby declare that this thesis is the result of my own original research and that no part of it has been presented for another degree in this university or elsewhere.

Candidate's Signature: Date:
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Supervisors' Declaration
We hereby declare that the preparation and presentation of the thesis were
supervised in accordance with the guidelines on supervision of thesis laid
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#### **ABSTRACT**

The main purpose of this study was to ascertain stress appraisals and coping styles among coaches and players in Ghana's premier league season 2020/2021. A descriptive cross-sectional survey design was used for the research. Using a census, 44 formally registered male coaches (Mean<sub>age</sub> = 42.30, SD =10.44) and 424 players (Mean<sub>age</sub> = 22.36, SD = 3.53) from 17 premier league clubs answered a questionnaire consisting of standardised measures on organizational stressor indicators (OSI-SP), stress appraisals (SAM), and coping methods (MCOPE). The data collected were analysed using Descriptive statistics, Multivariate analysis of variance (MANOVA) and Multivariate multiple regression. The findings revealed that stressors were common among football coaches and players, with selection being the most common stressor for both coaches (i.e., picking players) and players (i.e., being selected). The controllable-by-self, challenge and controllable-by-others were the frequently used stress appraisal mechanisms adopted by coaches. The results further showed that both coaches and players used more of problem-focused coping styles. Generally, the appraisal mechanisms of football coaches and players were significantly related to their coping styles. Controllable-by-self, for example, was linked to problem-focused coping in coaches. Appraisals of challenge, controllable-by-self and controllableby-others affected participants' problem-focused coping considerably (active coping). It is recommended that team managers, sport psychologists and sport organisations in premier league clubs should recognise that coaches and players face a variety of stressors and ensure that they include designed interventions (e.g., psychological skills training) aimed at providing enough psychological help for the identified groups to improve their performance well-being.

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# **DEDICATION**

To my, Mr. Marsell Kwami Avadu and our beautiful and lovely children,
Stanley, Barry, Audrey, Ephraim and Makayla.



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#### **CHAPTER ONE**

#### **INTRODUCTION**

Stress that is experienced at the workplace has generally been classified globally as a 21<sup>st</sup> Century Health Epidemic due to indication that stress at work is very common and many individuals continuously suffer from stress-related ailments. These conditions can be associated with a combination of physical symptoms like headaches, sleeping difficulties, psychological symptoms like anxiety, depression and behavioural symptoms like reduced performance at work, mood swings, absenteeism, low interest and work dropout of which Ghanaian workers are not exempted (WHO, 2016).

Research has indicated that as employees of sports organisations, professional football coaches and footballers continuously experience stressful encounters at their workplaces (Neil, Hanton & Mellaliue, 2011) and until these people learn to evaluate and deal effectively with stressors, they will continue to experience the negative effects of stress that are linked with negative outcomes like dissatisfaction, undesirable behaviours, poor psychological well-being, underperformance (Fletcher, Hanton, & Wagstaff, 2012; Gould, Guinan, Greenleaf, Medbery & Peterson, 1999; Tabei, Fletcher & Goodger, 2012) and unpleasant emotions like frustration as well as worrying (Sēve, Ria, Poizat, Saury, & Durand, 2007). Despite these challenges, stress research in Ghana has primarily focused on health workers, security personnel and other non-sporting populations. Despite previous attempts on stress research in Ghana, scholarly information on stress connected with professional sports in Ghana is virtually non-existent, though may exist. Therefore, an understanding of stress-related experiences of

Ghanaian football premier league coaches and players would be a crucial step towards helping with the designing of appropriate stress management interventions framework for coping effectively with stressful situations. Hence, this chapter deals with background to the study, problem statement, study's purpose, significance, delimitations, terms defined and how the remaining chapters of this thesis were organized.

### **Background to the Study**

Professional sports place extreme demands on coaches and athletes in their quest to achieve a common goal. Research has indicated that the complex nature of the environment within which elite coaches and athletes operate exposes them to many stressful situations due to many demands (stressors) that are placed on them. These stressors could negatively affect individuals' emotions, behaviours, performance outcomes and general psychological well-being if these persons are unable to evaluate the stressful situations positively and find their corresponding coping strategies (Arnold, Fletcher, & Daniels, 2016; Fletcher et al., 2012; Fletcher & Scott, 2010; Mellalieu et al., 2009; Olusoga, Butt, Hays, & Maynard, 2010; Tabei et al., 2012; Thelwell, Weston, Greenlees, & Hutchings, 2008a). Research has also indicated that even, when the coach was under stress, athletes were negatively affected, leading to poor performance outcomes and satisfaction (Jowett & Cockerill, 2003).

Stress can be explained as a considerable disparity that exists between physical and/or psychological demands and reaction capabilities, in conditions when failure to meet that demand has severe implications (McGrath, 1920, p. 20). Alternatively, Lazarus (1990) views stress less as a specific component of the association that exists between persons and their environments, but that

pays more attention to the psychological processes that underpin a situation. Some stress researchers (e.g., Lazarus, 2000; Lazarus & Folkman, 1984) see stress as the result of a transaction between persons (physiological, psychological, neurological) and the complex environment in which they find themselves. Based on these assumptions, according to Fletcher et al. (2006), stress is seen as "a continuous process in which people transact with their environment, evaluate the situations they encounter and striving to deal with matters that may occur" (p. 329). The process of stress includes the environmental demands (stressors), individuals' experience, how these demands (stressors) are appraised and a subsequent assessment of the personal resources (i.e., goals, beliefs, competence level, self-confidence, selfefficacy, sense of control, effective leadership skills) available to deal with the stressors (Cooper et al., 2001; Lazarus, 1999), by using specific coping strategies for an identified stressor (Lazarus, 1999; 2000; Lazarus & Folkman, 1984). Stressors refer to events or situations that disturb a person's state of balance and often trigger reactions called stress responses. When an individual is stressed, his or her sympathetic nervous system which controls movements up and down gets activated, resulting in bodily feeling states that relate to flight or fight like rise in heart rate, muscular tension and the release of adrenaline (Karageorghis, 2011).

Fletcher et al. (2006) described stressors as the "environmental stimuli that individuals encounter" (p. 329). Therefore, literature has suggested that opponents, audience effects, officiating officials, injury, facilities and equipment, salaries, high expectations, teammates, training environments, competition environments, weather effects, competition preparation, team

selection, contract issues, communication, leadership issues, travelling distances, coaches, athletes and team atmosphere are stressors that affect the way athletes and coaches think, feel and behave (Fletcher & Scott., 2010; Hanton et al., 2005; Kristiansen, Murphy, & Roberts, 2012; Mellalieu et al., 2009; Olusoga et al., 2009; Thelwell et al., 2008). Till date, several researches have been conducted to identify stress experiences of coaches (Fletcher & Scott, 2010; Kristiansen et al., 2012; Olusoga et al., 2009; Thelwell, 2012) and athletes (e.g., Arnold et al., 2016; Gould et al., 2002; Hanton et al., 2005; Mellalieu et al., 2006; Wagstaff & Fletcher, 2012; Woodman & Hardy, 2001).

One major challenge that emanated from these studies was that while athletes suggested their coaches as potential stressors to them (Giacobbi et al., 2004; Gould et al., 1993; Hanton et al., 2005; Mellalieu et al., 2006 Noblet & Gifford, 2002), coaches, likewise indicated that their players were potential stressors to them (Fletcher & Scott, 2010; Kristiansen et al., 2012; Olusoga et al., 2009; Thelwell et al., 2008; Thelwell, 2012; Thelwell et al., 2016). For example, all athletes interviewed in Kristiansen's (2012) study of US football players suggested that it was the coach who set standards and determined the tone and type of climate that existed among team players. Therefore, if there were inequities in salary of players, lack of information about other teammates' salaries, too low salary and even salaries that were too high, these added to the pressure on athletes and thereby stressed them. Furthermore, unhealthy and intense rivalry for team placement has a negative impact on the team's general morale and performance (Kristiansen et al., 2012). These athletes collectively acknowledged that inadequate handling of such situations might result in poor team performance (Kristiansen et al., 2012). Identifying

the organisational and performance stressors among 11 elite coaches (7 men and 4 women), Thelwell et al. (2008) indicated that coaches encountered an approximation of 50% of the stressors they experienced in performance settings through their athletes because of the difficulties pertaining to athletes' control. For example, when a coach gives an instruction to his athletes, a compliance to that particular instruction cannot be under total control of the coach. These interactions sometimes lead to frustration and unpleasant feelings. Due to coaches' numerous responsibilities and concerns for their athletes, these mutually stressful experiences became inevitable (Frey, 2007; Olusoga et al., 2009).

Furthermore, Kristiansen et al. (2012) opine that some particular stressors were exclusive to some particular groups and that stressors that would be identified might be unique to a particular cultural context (Mckay et al., 2008; Noblet & Gifford, 2002). Therefore, specificities about culture were necessary and would provide better understanding about the way other teams or groups perceived and coped with stress (Kristiansen et al., 2012). Thus, considering the cultural space that is occupied by soccer in the United States, Kristiansen et al. (2012) paid a special attention to how soccer players perceived environmental stressors that were unique to the socio-cultural context of US. Crucially, psychological episodes like stress and emotional related experiences could be idiosyncratic to specific context and not universal across cultures (Dzokoto, 2010; Markus & Kitayama, 1991). For example, somatisation research from cultural psychology had shown that in diverse societies, the mind and body were associated with expressing a distress (Dzokoto, 2010). This circumstance had been demonstrated to differ both

between and within cultures, with non-western cultures associated with various instances of physical symptoms in mentally upset people (Kleinman & Good, 1985; Kirmayer et al., 1998). Hence, studying these affect experiences within the Ghanaian context among premier league coaches and players would be worthwhile. Highlighting the importance of cross-cultural specific research on stress in sports, Noblet and Gifford (2002) reiterated that the cultural fabric of a particular sport should also be considered to better understand the circumstances that might particularly evoke stressful situations in the context of professional sports.

Further evidence indicated that as soon as a person encounters a stressor, there is cognitive appraisal. This is seen as the way individuals evaluate their environment and relate them to their beliefs, personal goals and values (Lazarus, 1966; 2000; Lazarus & Folkman, 1984). This appraisal process has been recognised as a key element that has a significant impact on the transactional stress process. As a result, stress researchers divided cognitive evaluations into two categories: primary and secondary appraisals. Individuals that use primary appraisal perceive circumstances as either unimportant to their well-being, benign-positive, or stressful. This means that people do not feel stressed when there is no goal at stake or no relevance of a particular situation (primary appraisal; Lazarus & Folkman, 1984; Lazarus, 1999, 2000). A benign-positive appraisal also emerges when a condition is considered to result in positive outcomes and well-being and is coupled with favourable attitude, such as joy, love and happiness. This may also not lead into stress. Nevertheless, whenever there is a goal at play or an important event (i.e., demand) from the environment which a person operates, and the

resources available to meet the demands are insufficient (Lazarus & Folkman, 1984). If proper coping methods are not used, the individual may experience negative feelings, such as worry as a result of this process (Fletcher et al., 2006; Lazarus, 1999). As a result, depending on how the individual perceives that particular experience or stressor, stress might be good or bad (Fletcher & Scott, 2010), thus, a person might see a demand as an opportunity, a challenge, or neither of them (McGowan, Gardner, & Fletcher, 2006).

Research further suggests that if a person has more or equal resources than the demands placed on them, they will not feel stressed (i.e., primary appraisal), hence the secondary appraisal will not matter because they can cope better (Lazarus, 1999). However, if demands put on a person are more than the resources available to challenge those demands, the individual may feel stressed (i.e., primary appraisal). Subsequently, the available coping resources are then evaluated (i.e., secondary appraisal) before finally implementing a coping strategy to manage the situation (Fletcher et al., 2006; Lazarus, 1999; Lazarus & Folkman, 1984). Therefore, a stressor may be evaluated as threatening, challenging or harm/loss reliant on individual differences in vulnerability and sensitivity to situations. The individual's interpretations, feelings and reactions to these encounters may differ as well (Fletcher et al., 2006; Lazarus, 1999). For instance, under similar conditions, people may express varied emotional reactions (feelings), thoughts and behaviours about a particular situation (Fletcher et al., 2006; Lazarus, 1999). While a person may show a depressive symptom as a response, another person may use anger as a response. Alternatively, another person may respond by

eliciting feelings of guilt and anxiety. Others may also respond with a feeling of challenge, rather than feel threatened.

Dixon et al. (2016) explored the correlation between danger and challenge cognitive appraisals as well as football coaches' coaching behaviours. Findings showed that coaches gained lots of advantages if they evaluated stressors as challenges. Dixon and partners reiterated that when people perceived that the resources available to them were inadequate in a particular situation, they responded with a maladaptive stress (i.e., threat). Alternately, if adequate resources were perceived to be available, responses then became adaptive (i.e., challenge), facilitating a drive towards an achievement of one's goal.

Moreover, challenge appraisals were associated with adaptive coaching behaviours, but threat appraisals were connected with unpleasant coaching tendencies (Dixon et al., 2016). Threat appraisals were associated with subjective stress, high anxiety levels, the use of emotion-focused coping to mitigate the negative feelings and thoughts associated with a stressful encounter, and less use of problem-focused coping to deal with the difficulty that was causing distress than challenge appraisals (Skinner & Brewer, 2002). Dixon et al. (2016) observed that coaches who regarded stresses as a challenge were better able to provide positive feedback and support to athletes because they believed they could handle the demands of the circumstances themselves. Additionally, coaches who appraised stressors as challenging experienced positive emotions that promoted good coaching behaviours, such as social support and positive feedback for stronger and better relationships with the athletes they coached.

Even though coaches recognised the stress they experienced affected their athletes to some extent, the overwhelming effects of their stress on the athletes negatively affected how they developed and performed psychologically, emotionally and behaviourally (Thelwell et al., 2016). Understanding coaches-players stress responses (i.e., bi-directional impact) in the context of professional soccer practice not only has practical implications for coaches and consultants working with players of various standards under cyclical stressful experiences, but it may also benefit empirical and theoretical research (Mellalieu et al., 2006; Neil et al., 2009).

Moreover, studying these psychological challenges could also offer a practical basis for the timing, structuring and content of strategies for coping aimed to support coaches and players affected by their psychological states due to stressful experiences they encountered. Besides, little was known about the overall stress-related experiences of coach-athlete interactions, subsequent appraisal and associated coping styles or strategies from an integrated perspective. From socio-cultural standpoint, patterns of stressful responses and subsequent appraisal might have originated from diverse common values, standards and social behaviours (Basabe et al., 2000; Mesquita & Markus, 2004). Hence, coping styles to control them might also not be similar across cultures (Ekman & Davidson, 1994). Rather, such strategies might be trapped in diverse cultures through learned experiences to manage encountered stressful situations (Hagan, Pollmann & Schack, 2017). From a geographical point of view and best of the researcher's knowledge, there was no known evidence accounting for stress appraisals, using any elite sport population in Ghana, though some might exist. Therefore, the current study investigated the

stressors that coaches and their respective players experienced, how they appraised these stressors, the coping strategies they adopted to cope with stressors and how these psychological constructs interacted. Knowledge about these experiences would assist sport psychologists and other stake holders to design appropriate stress management interventions for coaches and players to promote their psychological well-being and performance outcomes.

#### **Statement of the Problem**

Research evidence had indicated that coaching and playing professional football, especially at elite level could be associated with many stressful encounters (Dixon et al., 2016; Kristiansen et al., 2012). When coaches and athletes learn to manage and cope effectively with stressful situations, it is more likely to result in psychological well-being, positive emotions, satisfaction and enhanced performance outcomes (Fletcher & Scott, 2010). However, if these situations are not well managed or coped with, it may lead to loss of jobs or performance decline, lack of psychological well-being as well as dissatisfaction due to excessive pressure on the job (Arnold et al., 2016; Jowett & Cockerill, 2003; Nicholls et al., 2011) and withdrawal from the particular sport (Frey, 2007). Furthermore, McCann (1997) indicated that when coaches experience strain, it negatively affects the level of confidence of their athletes and vice versa, leading to performance inadequacies, if they are unable to cope well with such strain.

Anecdotal evidence has shown that participating in professional football in Ghana is associated with many stressful situations. For example, a former Ghanaian international, Sam Johnson, in an interview at a media station (Adomonline.com, 2018), stated emphatically that coaching in Ghana

is very stressful and that if footballers are not well taken care of, they may refuse to either play their best or listen to instructions from their coaches. This ex-international star further reiterated that clubs which engage the services of coaches fail to provide quality training environments, offer poor remuneration and lack good organisational structures. Other noted concerns include poor officiating, selection interferences, travelling issues, coaches' and players competences as well as communication and leadership issues. Additionally, many professional football coaches lose their jobs when the players they coach consistently underperform and vice versa (Akenteng, 2019; Gould et al., 2002). These high expectations to win and consistent scrutiny on the performance of coaches and footballers by club managers, spectators, sponsors and the media put excessive pressure on them to perform without excuses. For example, a former coach of Accra Hearts of Oak football club by name Offeh Ansah had a hear<mark>t related attack whilst coaching his team in 2005. This might</mark> have been as a result of the demanding nature and pressure under which he was operating. Additionally, while some authors have considered stress as a unitary process, many researchers have ignored the entire stress process (i.e., stressors-cognitive appraisal-coping) which Fletcher et al. (2006) and Lazarus (1999, 2000) suggest would lead to a lack of a clearer understanding of the entire linkages between these constructs and their effects.

Even though there are several stress related studies in Ghana, most of these studies have primarily been focused on nurses (Acquaye, 2011), police (Arthur, 2016; Gyamfi, 2014), and other employees (Azumah, 2014; Nnuro, 2016; Duah, 2016). For example, Arthur's (2016) study on occupational stress among police officers in Cape Coast revealed that organisational constraints

like accommodation issues, work overload and public criticisms were more stressful to police officers than their exposure to physical hazards. Similarly, Nnuro (2012) detected workload as a key source of stress in his study on the impacts of occupational stress on job performance among Koforidua Polytechnic workers and sought social help to manage the issue. Furthermore, Dorcoo (2016) in his research on how stress affects Nurses at the Tema General hospital found issues, such as roles at work, level of control and interpersonal relationships as their major stressors.

Till date, research in Ghana on stress-related experiences across diverse sporting populations is untapped. Due to lack of empirical evidence in Ghana, little is known about stress related experiences reported by Ghanaian coaches and players as well as their coping styles for self-management or regulation in the premier league.

## Purpose of the Study

The purpose of this study was to assess stress appraisals and coping styles among Ghana Premier League coaches and players in 2020/2021. In specific, the study:

- detected the organisational stressors prevalent among football coaches and players in the Ghana premier league;
- 2. examined the stress appraisal measures adopted by football coaches and players in the Ghana premier league;
- explored the coping styles adopted by football coaches and players in the Ghana premier league;

- 4. determined the extent to which age and years of experience contributed to the organisational stressors' indicators among football coaches and players in the Ghana premier league;
- 5. investigated the associated stress appraisals and coping styles among football coaches and players in the Ghana premier league.

## **Research Questions**

This study was guided by the following research questions:

- 1. What organisational stressors are prevalent among football coaches and players in the Ghana premier league?
- 2. What stress appraisal measures are adopted by football coaches and players in the Ghana premier league?
- 3. What coping strategies are adopted by football coaches and players in the Ghana premier league?
- 4. To what extent would age and years of experience contribute to organisational stressors indicators among football coaches and players in the Ghana premier league?
- 5. What is the association between stress appraisals and coping styles among football coaches and players in the Ghana premier league?

### **Significance of the Study**

The results of the study would serve as the empirical basis for the researcher, other sports psychologists, football club Managers, the Ghana Football Association and the Ministry of Youth and Sports and reveal stress experiences and coping styles adopted by coaches and players in the Ghana premier league. This would serve as a guide to practitioners to design and implement appropriate stress management training programmes through

workshops and seminars. Furthermore, through this study, practical recommendations would be given to all stakeholders in charge of football coaches and players and guide policy formulation and implementation of stress management standards and regular assessments to support the psychological well-being and job performance of soccer coaches and players. Coaches and players would be able to learn the abilities needed to handle stresses and successfully cope with tough situations both inside and outside of competitions using these. Based on the findings of this study, more research in the topic of stress in other sporting events in Ghana might be conducted. Finally, the findings would augment existing literature with new knowledge of the stress experiences of coaches and players in the socio-cultural context of Ghana.

#### **Delimitations**

This study is delimited to Ghanaian football premier league coaches and players in the 2020/2021 season. The study concept was also delimited to stress from a transactional perspective (stressors-cognitive appraisals-coping styles). Furthermore, for data collection purposes, this study employed survey instruments in the form of questionnaires, allowing the researcher to use a large sample size to generalise the findings about the target population.

# Limitations

This research has some limitations that need to be addressed in subsequent studies. For instance, only males playing only one sport (football) in the 2020/2021 premier league season participated in the study and so findings of the current study can only be generalisable to male footballers and coaches in the 2020/2021 Ghana premier league. Further, compared to players,

the number of coaches were very few and this may have affected the cell sizes used in analysing the data. This can pose a potential threat to the results of the present study. Again, the retrospective nature of the data collected might not reflect the true experiences of stressors as reported by both coaches and players.

Another limitation of this study is that because participants were required to react to three instruments at the same time, some changes had to be made to minimize the number of items based on expert advice while also avoiding boredom and annoyance among the respondents. Only the intensity dimension of the OSI-SP instrument was used while for the MCOPE, apart from reducing the number of subscales to seven (7), the coaching effectiveness section was also not measured due to the fact that the items were too many considering the nature and characteristics of the sample used for the study. Some of the data could not be collected face to face hence, it is possible some may have just ticked without paying attention to specific details.

Moreover, this study could not account for between and within club transfers within the period of the premier league to ascertain whether differences in organizational structures could be a source of stress for coaches and players. Due to this methodological gap, the idiographic experiences of stressors, appraisals and coping of coaches and players could not be accounted for: hence, reported stress-related experiences by the sample may not mirror or mimic actual stress encountered.

#### **Definition of Terms**

- **Coaches**: Refers to professional coaches who coach in the premier league of Ghana (GFA, 2019).
- **Coping:** It is defined as constantly shifting cognitive-behavioral attempts to deal with specific external and/or internal obstacles that an individual assesses as being as difficult as or greater than their available resources (Lazarus and Folkman, 1984 p. 141).
- Footballers: Refers to professional footballers in the premier league of Ghana (GFA, 2019)
- **Organizational stressor:** These are environmental demands (stimuli) that relate directly and primarily with the organization in which a person operates (Fletcher et al., 2006).
- Performance Stressor: It refers to the environmental demands (stimuli) that relate directly and primarily with competition (Fletcher et al., 2006)
- Primary appraisal: Stress can be expressed as a constant process in which humans interact with their environments, examining situations in which they find themselves, and attempting to control challenges that may occur (Lazarus & Folkman, 1984).
- **Secondary appraisal**: It is the judgment in relation to what an individual might and can do or an evaluation of coping options available for use in a particular encounter (Lazarus & Folkman, 1984).
- **Strain:** It is defined as a person's negative behavioural, physical and psychological reactions to stressors (Fletcher et al., 2006)

**Stress:** It refers to a constant process in which humans interact with their environments, analysing situations in which they find themselves, and attempting to control challenges that may occur (Fletcher et al., 2006; Lazarus, 1999).

Stressor: A stressor is a situation, an event or an environmental demand (stimuli) that an individual encounters (Fletcher et al., 2006; Lazarus, 1999).

## **Organization of the Study**

This study was in five chapters. Chapter one which constituted the introductory part of the study, included the background to the study, problem statement, purpose, research questions, significance, delimitations, limitations, definition of terms, and organisation of the study. The chapter two dwelt on literature review, specifically theoretical framework of the study, concept of stress, concept of stress appraisal and coping styles and a chapter summary. Chapter three centered on the methodology. This chapter involved the research design, population, sampling procedure, data collection instruments, data collection procedure, data processing and analysis and chapter summary. Chapter four presented the findings and its discussion in line with the research questions and summary. The final chapter five dwelt on summary of the main findings, conclusions, recommendations, practical implications and suggestions for further research.

#### **CHAPTER TWO**

#### REVIEW OF RELATED LITERATURE

The purpose of this study was to assess stress appraisals and coping styles among Ghana Premier League coaches and players in 2020/2021. This chapter extensively reviewed relevant previous and current studies on stress and critically analysed and synthesised the coach-athlete stress literature across the globe. This chapter was specifically organised as follows;

# The Concept of Stress

- i. History of Stress
- ii. Stimulus Perspective of Stress
- iii. Response Perspective of Stress
- iv. Weaknesses of the Stimulus and Response Perspectives of Stress
- v. Individual Differences
- vi. Interactional Perspective of Stress
- vii. Transactional Perspective of Stress

# Theoretical Frameworks

- i. The "Meta-Model of Stress, Emotions and Performance" (Fletcher et al., 2006).
- ii. The "Transactional Theory of Stress and Coping" (Lazarus and Folkman, 1984).
- iii. Coach-Athlete Stressors
- iv. Cognitive Appraisals
- v. Coping in Sport
- vi. Coping Categories and Dimensions
- vii. Research on Coach-Athlete Stress

#### viii. A Chapter Summary

## **The Concept of Stress**

### **History of Stress**

The term, "stress", has existed since 14<sup>th</sup> century and was referred to as an illness, a suffering, straits and or a danger (Lumsden, 1981). Hooke (cited in Hinkle, 1973, 1977) exploited stress in the physical sciences in a disorderly fashion in the late 17th century before the early 19th century. The term, "load", was defined as an external force, but "stress" is defined as the ratio of an internal force (produced by load) to the force acting on it. Strain has also been defined as a situation in which an object gets distorted or deformed" (Lazarus & Folkman, 1984). In 19th century, medicine, stress and strain were thought to be the root of ill-health and Cannon (1932) described stress as a homeostatic disturbance caused by hypoglycemia, cold, or a lack of oxygen and despite using the term, "stress", casually, he referred to his subjects as "people under stress" and concluded that measuring stress levels was possible (Robinson, 2018).

Stress has been used by Selye (1936) as a "coordinated set of defenses in the body that opposes any amount of noxious stimulus (in addition to psychological threats), and names this reaction as the General Adaptation Syndrome" (Lazarus & Folkman, 1984). Stress has been known not as a demand from the environment (known by Selye as a "stressor"), but rather as a general set of physiological responses and procedures these demands create. Selye (1950, 1951-1956) released an annual report on stress in the early 1950s, and in 1956, he compiled these works into a book titled, "The Stress of Life." There have been about 6,000 papers on the physiology of stress by 1956.

(Appley & Trumbull, 1967). In 1955, Selye was asked to speak at the American Psychological Association, which sparked a surge in interest in stress research ranging from physiology to psychology and certain behavioural sciences, resulting in the present increase in interest in stress research. With suggestions from Hinkle (1977), Wolff, (1953) also contributed greatly to how the stress concept in medicine evolved. This is because, for example, in the 1940s and 1950s, Wolff wrote about sickness and life stress (Wolff, 1953) and considered stress to be a bodily state. He further explained stress as a "state of dynamism inside an organism that is not a burden, load, stimulus, symbol, an assault or the social, external or internal part of the environment". According to Lazarus and Folkman (1984), Wolff's emphasis on a state of "dynamism" that involved adapting to demands and Selye's arranged physiological reaction pattern was significant for many reasons. Firstly, the physical sciences referred to stress as a passive or inactive body that is deformed by loads from the environment but biologically, stress was seen as an active process that "fights back". By this, the body took part in efforts of adaptation that was critical in restoring and maintaining balance, a concept that was derived from Claude Bernard (1815-1878), a French physiologist. This concept was based on Claude's ability to discover the liver's sugar-storing functions.

Secondly, as a defensive biological procedure, stress dealt with an exciting analogy to a procedure called "coping' in which an individual fought to manage psychological stress. Thirdly, the dynamic state concept pointed to important aspects of stress processes like costs involved, diseases, resources for coping and distresses, benefits, victory over adversity and competencies (Lazarus & Folkman, 1984). Lastly, in trying to view stress as a state of

dynamism, more attention was directed towards linking the organism and its environment, feedback and interplay. There was the acceptance that the dynamism has been helpful in having adequate and complete definition of stress that depended exclusively on what was happening within the organism. Within this period, there was the need for an awareness of happenings related psychological and sociological stress. Furthermore, Marx, Weber, and Durkheim all wrote extensively on "alienation." Durkheim (1893) had considered the term alienation as a state of anomie that occurred when individuals experienced loss or lack of suitable standards to direct their efforts in achieving goals that were socially prescribed. Seeman (1971) showed five variations of alienation which included isolation, powerlessness, normlessness, meaninglessness, and self-estrangement. Current sociologists prefer the term strain to stress when referring to strategies of social disturbance or disorder, which is similar to Wolff's perception of stress in a person as a disturbed body's state (Lazarus & Folkman, 1984). Therefore, panics, riots, increase in mental illness, suicide and crime were all social strain. Thus, putting a phenomenon in a group was more preferred than individualizing a phenomenon at the personal psychological level. In his sociological analysis of shared conduct (riot, panic) as well as the literature on natural tragedy by Smelser (1963), there has frequently been a link between social stress and psychological stress (Baker & Chapman, 1962; Grosser, Wechsler, & Greenblatt, 1964).

Additionally, Mechanic's (1978) study of a student's examinations stress, Lucas's (1969) study that involved a tragedy at a coal mine, Radloff and Helmreich's (1968) research that involved how people worked and lived under

water bodies and research of stress experienced in an organisation (Kahn, Wolfe, Quinn, Snoek, & Thai, 1964) have also contributed to the growth of stress research. The uncertainties between psychology and sociology became challenging to draw in these situations. Moreover, there was chaos in the terminology used with stress (or strain) which were in some instances the agent and at other times the response. For many years, stress was understood as a structure for establishing thoughts about psychopathology, on the individual psychological side, especially in Freud's theory of psychodynamic based writers and anxiety was used instead of stress.

Until 1944, stress was non-existent in psychological abstracts. Symptoms were generated by delaying or blocking intuitive release of satisfaction; in later Freudian interpretations, conflict-based anxiety functioned as a sign of threat and generated mechanisms for non-satisfactory stress and defense management that generated symptoms whose features depended on defense types (Lazarus & Folkman, 1984). The reinforcement-learning theory of Spence (1956) and Hull (1943), which for several years has been dominant in American psychology, was similar to the Freudian formulation. Anxiety has been considered as a reaction that is typically conditioned leading to pathological ways of reducing anxiety (Dollard & Miller, 1950).

Anxiety has been overly emphasised in psychological thought and studies. Evidence-based research on anxiety increased in the early part of the 1950s after Taylor (1953) published a trait scale for measuring anxiety. This scale spawned a plethora of studies on the impact of anxiety on memory, learning, skilled performance, perception and the perspective of anxiety as a source of cognitive interference or motivation (Spence & Spence, 1966), with

Spielberger (1966) compiling and editing many of these studies into a book. Meanwhile, numerous publications have continued to emerge with the word anxiety rather than stress in the title, or with both keywords in the title, indicating an interest in anxiety as if it were stress (Spielberger & Sarason, 1975; Spielberger, 1972; 1966, Lazarus & Folkman, 1984).

Another major event that has immensely contributed to research and theory on stress has been World War II and this is indicated in the book that was written by Grinker and Spiegel (1945) on the Second World War with the title, "Men Under Stress," which showcased the psychological application of stress. The concern of the military men was the impact of stress on their functioning in the course of the combat which could have increased the soldiers' susceptibility to death and injury and additionally weaken the potential of a combat group to effectively take action. For example, soldiers got frightened during dangerous periods on missions of bombing and such conditions regularly led to psychotic-like or neurotic-like breakdowns (Grinker & Spiegel, 1945; Lazarus & Folkman, 1984).

When the Korean War began, several studies focused on stress and its effects on skilled performance and adrenal-cortical hormones while some latter studies were carried out aiming to develop strategies for choosing fewer susceptible war military personnel while others developed strategies that could function better when they were stressed. The Vietnam War spurred more study on battlefield stress and its physiological and psychological impacts (Bourne, 1969), with Selye playing a key role. Additionally, relating to war stresses was the publishing of books on bombing effects on civilian functioning and confidence (Freud & Burlingham, 1943; Janis, 1951), wartime survival (Von

Greyerz, 1962), military prisoners' manipulations (Biderman & Zimmer, 1961), and concentration camp (Bettelheim, 1960; Cohen, 1953; Dimsdale, 1980).

A key milestone in promoting research and theory on stress was Janis's (1958) study on surgical threat of a client who was receiving treatment in psychoanalysis. This added to an increase in the quantity of books that had been dedicated to the systematic study of the stress theory and methodological processes, and a rise in the social foundations of stress that existed in the environment. Samples of these include books published by Levine and Scotch (1970) and McGrath (1970). Increasing recognition of the inescapable nature of stress, in that while stress has always been part of life, how an individual cope with it determines the outcome of individual's adaptation (Lazarus & Folkman, 1984). There has been a transition from stress to coping in Psychological Stress and the Coping Process (Lazarus, 1966). Coelho, Hamburg, and Adams (1974); Folkman and Lazarus (1980); Horowitz (1976); Haan (1977); Levinson, Darrow, Klein, Levinson, and McKee (1978); Lazarus and Launier (1978); Lazarus & Folkman (1984); Menninger (1963), Murphy and Moriarty (1976); Murphy and Moriarty (1976); Murphy and Moriart; Pearlin and Schooler (1978); Vaillant (1977).

Lazarus and Folkman (1984) suggested that five recent progresses further increased people's appreciation of stress and coping research, namely the revival of interest in psychosomatics, individual differences, increase in a life course developmental viewpoint, behaviour therapy development aimed at treating and preventing diseases or behaviours that promote vulnerability to illnesses and the impact of the environment on humans. For instance,

differences in individuals emanated from studies on the way stress affects performance that has been triggered by the Second World War as well as the Korean War. In the 1950's, this challenge, which was of interest to individuals who were not military men and women, caused many laboratory and field experiments (Lazarus, 1966) and the dominant view has been reasonably simple and anxiety or stress has been known to lead to the weakening of skilled performance by either extremely creating a distraction or an interference.

Thus, researchers in psychology who have been part of this research regularly cited Yerkes and Dodson (1908), who propounded the inverted Utheory which proposes that an increase in arousal enhances task performance up to a particular point, after which there is increase in the disorganisation and a decrease in performance. As a result, it became clear that there were considerable disparities in how people responded to stress and performance had not been uniformly reduced or improved. For example, Lazarus and Eriksen (1952), observed a clear rise in variance instead of the average decrease or increase in the efficiency of performing under stress that was caused by failure. Stress varied peoples' performances, with some experimental participants performing better while others performed poorly. Many studies revealed that performance could not be predicted by an individual by just referring to a stressful encounter and that to predict the result of a performance, attention was needed to study the psychological procedures that produced the individual differences in how people react. For instance, individuals can vary in optimal arousal level or the way they evaluate specific circumstances and how they deal with its difficulties.

The increasing awareness of how important person factors like coping and motivation (Lazarus, Deese & Osier, 1952) result into variations in formulating a stress problem and skillful performance. For instance, many researchers (Sarason, 1975, 1972, 1960) started considering the likely interactions of mediating or moderator variables. While defining the problem migrated towards environment and personal factors, temporary outcomes of emotions and performance, studies concerning skilled performance research under stressful situations have been mostly anticipated based on processes that are linked to stress and can also lead to how individuals react differently.

Meanwhile, the original problem, which is how stress affects performance, has not been fully rejected. For example, Schonpflug et al. (1983) and reviews that analysed the current stress research and fatigue in the performance of humans, brought back conversant variables and concepts like the effect of noise on fatigue, pressure of time and effective problem-solving, but twisted anew as concepts like motivation, cognition and coping have been added onto the previous ones with an effective performance. This helps to promote concerns about performance and stress, but in a manner that promotes studying the variances among individuals. Psychosomatic medicine has grown rapidly 50 years ago (Lipowski, 1977), but afterwards experiences drastically reduced until lately. This decline has been the product of poor data base for the simple view that many illnesses like colitis and ulcers have been explained with regards to special kinds of psychodynamic processes. According to Alexander (1950), unsuccessful efforts have been made for the use of psychodynamic formulations so as to detect "migraine", "ulcer" and "colitis" personalities. For more than 20 years, psychoanalytic concepts in traditional

setting have been less responded to with more attention being paid to environmental factors that result in illness. Because of that psychosomatic medicine that is committed an intra-psychic emphasis suffered from confidence.

The revival of present concern has been driven by many changes in outlook that concerns illness and stress. Selve's work, has been a major contributor supporting the opinion that psychological and social issues are essential in the illness and health of men. For example, there has been a shift of psychophysiology and medicine, assumes that sickness is stringently the result of environmental agents like damaging accidents, viruses, bacteria and toward approval of the view that susceptibility to "host resistance" or illness is significant as well. Moreover, studies on the effects of hormones on tissues and stress (Mason, 1975; Mason et al., 1976) have led to susceptibility that people who doubted traditional psychodynamic inventions have accepted. Presently, thinking psychosomatically is inserted in the theory of research and stress and it appears to have a new energy that is improved, partly by this extensive, more complex approach. Many behavioural medicine or psychosomatic books, such as those by Weiner (1977), Weiss, Herd, and Fox (1979), and Norton (1982), as well as Adler's (1981) book on the relatively new field of stone and psycho-immunology, Cohen, and Adler's (1979) health psychology books, confirmed the revival of passion.

Further prove of the increasing commitment in considering psychological issues in health emanated from American Psychological Association's decision to form the Health Psychology Division (Division 38), and the journals published, including The Human Stress Journal, Health

Psychology Journal, The Journal of Psychosomatic Research, Behavioral Medicine Journal, The British Journal of Medical Psychology, Psychological Medicine Journal, and the Health and Social Behavior Journal. Many specialised journals include related research, and other general journals (e.g., The British Journal of Clinical Psychology and the Personality and Social Psychology Journal) also began to publish research that focused on health.

Recently, behaviour therapy has emerged too as a substitute to traditional psychodynamic cure. Previously, its position was positive, scientific and narrow, based on militantly detached from thoughts of psychoanalysis as well as operant and classical conditioning. Later, it developed into a more flexible and multifaceted cognitive behavioural treatment (Ellis, 1962; Ellis & Grieger, 1977), which saw the interpretation of adaptational encounters by individuals as well as interventions to change thought actions and feelings as critical issues in psychopathology and successful coping. Many cognitive behavioural therapists identified their work as the origin of the link between psychodynamic and behavioral methods (Lazarus, 1980; Mahoney, 1980; Wachtel, 1980), which led them into the stress and coping regime, as evidenced by Meichenbaum's (1977) cognitive coping interventions, Meichenbaum and Novaco's (1978) adoption of "stress inoculation" concepts in which individuals are taught to manage upcoming stressful situations (Beck, 1976).

A fourth component softening stress interest, adaptation and coping was a significant topic in developmental psychology. Traditionally, developmental psychology has concentrated on adolescence and infancy. There was a rising alarm of adulthood challenges due to how fast people were

reaching old age in the 1960s. Erikson's (1963) work brought a shift from Freudian-based psychology on initial stages of life and resolving the oedipal fight in adolescence in order to be aware that key psychological changes also took place during the young adulthood stage and afterwards.

The field of developmental psychology became was dedicated to vary over the life course. Gail Sheehy's (1976) book popularised adult transitions, which was based on Levinson et al (1978)'s study on midlife crises and transitions. Several writers' writings also contributed to the growing interest in developing adults. Similarly, the social and political consequences of growing adults led to a shift of research capitals in studying difficulties facing aged people and the formation of the National Institute on the elderly.

An important issue that is voiced in new literature related to transitional stress, social change and coping. For example, there is great attention in the midlife crises, empty nest, retirement and widowhood. Simultaneously, there has not been much attention than on infants' and children's emotional development and how children get to understand the individual benefits of social interactions and relationships. Whether focusing on children or adult's development, issues are commonly ordered around adaptation, stress and coping.

The inclusion of a strong social and environmental ecological focus in behavioural science research that was a key aspect that piqued the people's interest in stress and coping. Psychiatry and clinical psychology have begun to shift away from a strict intrapsychic emphasis, which included mechanisms underlying illness that were primarily within a person, and toward an environmental focus. Psychological thought had moved toward a path where

individuals got interested in the environments people live in. The rise of ethology as a naturalistic science had boosted environmental psychology. Viewing the effect of research in ethology, social scientists became conscious that they did not understanding the natural habitats of people.

The physical and social demands of the environment contribute to stress (Stokols, 1977). Constraints and resources in the environment (Klausner, 1971) on which the chances of coping rely are equally important elements. As a result of the establishment of a science of the environment, stress research and theory gained new followers and a broader perspective.

More recently, it has been recognised that stress is an unavoidable part of life, and how people deal with it is what distinguishes them. Improvements in behavioural health psychology, clinical intervention, medicine, psychosomatics, and the rising concern in the stressful physical environment and its effects on humans have all had a substantial impact on stress studies and on how individuals react differently to stressful situations. Traditionally, stress has been viewed as both stimulus and reaction.

### **Stimulus Perspective of Stress**

The stimulus definitions are focused on environmental situations that put excessive demands on people (Holmes & Rahe, 1967) that causes an experience, but not the experience itself. These include illnesses, natural disasters, harmful conditions or loss of job. The assumption of this approach is that certain circumstances are normatively stressful causing strain. It is assumed that life situations demand equal levels of adjustment for all persons and that an illness will result when a certain common threshold of adjustment is exceeded. This stimulus approach does not consider individual differences

in evaluating these life events. Initially, Rahe and Holmes (1967) viewed humans as passive recipients of stress and as subjects who had no influence on the intensity, frequency and degree of stressors experienced (Walinga, 2015). With this method, Holmes and Rahe (1967) established the Social Readjustment Rating Scale (SRRS), which was composed of 42 life events (such as divorce, job loss, marriage and relocation) and was rated based on the individual's estimated degree of adjustment in facing a certain demand.

# **Response Perspective of Stress**

Response definitions have prevailed in medicine and biology, and stress is defined as an unspecific reaction of the human body to any form of pressure placed on it, or as a physiological response pattern that Selye (1956) includes in his General Adaptation Syndrome (GAS) model. The individual in this situation is regarded as reacting with stress or being under stress. According to the response method to study, substantial demands are imposed on the organism, hormonal and neurological reactions. These hormonal and neurologic responses prepare the person to fight or run from potentially perilous situations. According to this model, stress involves three phases: namely exhaustion, resistance, and alarm, hence, if stress is severe or chronic, it could lead to an adaptational illness or death. Later, Selye (1983) suggested that responding to stress could lead to negative or positive consequences because of mental evaluations of the physiological experience or physical symptoms. This way, Selye (1983) indicated that individuals could experience stress as negative stress (distress) or positive stress (eustress). Therefore, stress as a response has been regarded as a physiological construct. Definitions concerning stimulus and response have a narrow usage, because stimulus is

considered stressful only in relation to its response to stress (Lazarus & Folkman, 1984).

The fact remains that extreme environmental circumstances like losing loved ones, imprisonment, natural tragedies, severe sickness, military combat, torture and nearness of death caused stress for almost everybody. However, these instabilities that occur in almost everybody from dangerous situations must not allow researchers to settle for a one-dimensional idea that stress emanates from the environment. Such severe circumstances are very common, but using them as a model generated scarce theory and applications. Significant challenges occur when the major disparities in individuals' responses to general stressors are ignored (Lazarus & Folkman, 1984). While people migrate from severe life situations to minor or ordinary life stressors, differences in response becomes even greater. What is stressful for one individual may not be so for another. Therefore, pretending to accept that there should be an objective means to defining stress as environmental circumstances without considering the characteristics of the individual. Based on the above, it was necessary to consider a relational viewpoint and to recognise the nature of that association so as to understand multifaceted response pattern and its adaptational results.

### Weaknesses of the Stimulus and Response Perspectives of Stress

Stimulus and response underpinnings of stress have been criticised in many ways. For example, Lazarus (2006) explained that referring to stress as a response is naive and repetitive. According to him, defining stress as a stimulus and/or response raised two direct concerns. Firstly, what is it that actually makes a specific stressor exceedingly demanding, and secondly, what

about the response indicates a specific stressor (Lazarus & Folkman, 1984). Reacting to a stressful event or stimulus is referred as the stress response, meanwhile, the event or stimulus is regarded stressful for the reason that it leads to a stress response. It is evident that neither the stressor, event, or reaction is described without relation to the other, limiting each of them slightly. Thus, care must be taken when using any of these constructs as meaningful definition of stress because of these inadequacies.

Additionally, it is complex when determining differences between physiological, physical, and psychological stress. A decrease in heart rate, for example, might indicate physiological stress. Meanwhile, this increase in heart rate could be that the particular individual might have been involved in a warm-up activity, yet in a relaxed psychological state. Again, the answer cannot be interpreted as a response to psychological stress without stating the stimulus. Lazarus (2006) indicated that despite similarities that exist in engineering can enhance the understanding of strain and stress, such similarities do not seem to unearth the seeming complexity of the processes of stress among humans. It is not automatic that psychological stress will definitely lead to strain. The person factor determines whether an individual initially perceives an encounter as a danger and then determines, if they have the resources to cope with those demands before determining whether the situation is stressful or not. Despite the intuitive requirement to regard stress as a stimulus and/or reaction to environmental stimuli, it has become clear that these definitions are limiting and that it is vital to include the influence of the individual's interaction with his or her environment.

### **Individual Differences**

Even though some particular stimulus conditions are considered to be universally and normatively stressful, the variations in responses to possible stimulus events make this argument more multifaceted. While studying physiological stress, Selve (1936) proposed that it is possible to consider anything that is "noxious to tissues" as a source of stress. Nevertheless, this definition needs to be clarified as to what "noxious" means. For instance, a hockey ball cannot be considered noxious until it hits a player's head leading to pain. Considering psychological stress as against physiological stress even worsens the difficulty in understanding what exactly is regarded "noxious". Furthermore, stating that something is unpleasant because it causes stress response is circular, as previously said that neither the source of stress nor the reaction to it can be described or characterized without reference to the other (Lazarus, 2006). Lazarus (2006, p.54) further proposed that the "kind and extent of stress response" to exceptionally prevailing stressful situations like an Olympic level performance, differ among individuals and therefore, understanding these differences is important (Olusoga, 2011).

Person to person responses to stressful events become even more deceptive when comparing responses to the day-to-day inconveniences encountered by people and major catastrophic events. In trying to explain this, even though losing a loved one by death could be considered generally stressful, it is still possible that individuals will respond to it differently depending on many situational and personal factors. Based on these factors, it is clear that what one person may consider very stressful, another person would consider it as no stress at all. For example, whereas player A may be

stressed as a result of a terrible connection with her or his coach, player B may perceive such a bad relationship as irrelevant and immaterial to achieving her or his goals and hence feel very little or no stress at all. Prior to World War II, the Inverted-U hypothesis devised by Yerkes and Dodson (1908), was employed to explain the effects of strain on skilled performances. The Inverted-U hypothesis, in particular, predicted that as anxiety levels rose, so would skillful performance, but only to a point. When anxiety rises beyond the optimal level, performance would begin to decrease. Nevertheless, studies conducted during the 2<sup>nd</sup> World War, emphasized the need to consider individual differences in such instances.

In their review of stress research, Lazarus, Deese and Osler (1952) indicated that the same stressful situation can have a facilitating impact on some performers, yet become debilitative to others. Recently, Fletcher et al. (2006) and Olusoga et al. (2011) have added their voices to the fact that a similarly stressful encounter may not necessarily be a stressor to everyone in the group. Further, they suggested that stress is not always debilitative as was previously viewed, but can be facilitating as well as depending largely on the situation or characteristics of the person involved. It is therefore clear that defining stress without critically considering the characteristics of the person would not give a true picture of the stressful experiences people encounter.

# **Interactional Perspective of Stress**

This approach to measuring stress considers the interaction that occurs between situational and personal factors of people in stressful situations. The relationship that happens between stimulus and reaction is about cause and effect in this perspective and it is generally stable (Cooper et al., 2001). In

situations where interactions do not occur or vary from the predicted relationship factors, such as personal (hardiness, self-efficacy, optimism), situational (perceived controllability) or social (availability of social support network) could account for such variations. The interactional approach in studying stress involves the individual's environment forming two independent variables, coming together to influence or affect the person's cognitive-emotional reactions (i.e., the dependent variable) and at the same time remain unchanged and liberated of each other (Fletcher et al., 2006). The interactional viewpoint of stress has been established in literature by many researchers in sport psychology (Campbell & Jones, 2002; Kelley & Gill, 1993) and job-related settings (Kaufmann & Beehr, 1986). Particularly, the job stress research, permitted researchers to understand work stressors and how these stressors affect the health and wellbeing of employees (Cooper & Dewe, 2004).

Meanwhile, how the interactions come about by the relevant factors cannot be explained by the interactional conceptualisation of stress. Certainly, the existence of moderator variables is inadequate to describe the multifaceted association between an individual and individual's environment. Because the environment and the individual are both interconnected, there cannot be just one of the Stimulus (cause) and Response (effect). To circumvent this restriction, the transactional approach of stress emphasises the dynamic nature of the person-environment interaction. Explicitly, a person's meaning about how they relate to their environment is critical to how they feel stress.

## **Transactional Perspective of Stress**

Lazarus and Folkman (1984) then pushed for a new definition that highlights the association that exists between persons and their environment. The personal features of the individual are accounted for on one side, with the kind of environment on the other. Lazarus and Folkman (1984) viewed stress less as specific component of a link between an individual and an individual's environment, but rather as that which emphasises more on the psychological processes underpinning an event. This process nature of studying stress has been broadly supported by many stress researchers (Fletcher et al., 2006). According to these researchers, psychological stress cannot be objectively predicted as how people react to stress without referring to their personal indicators or characteristics. Thus, psychological stress is a link that exists between individuals and their environment that the individuals judge as demanding or beyond their resources and jeopardizing their well-being (Lazarus & Folkman, 1984, p.19). The judgment that a certain personenvironment relationship is stressful is based on cognitive evaluation and coping as described in Lazarus and Folkman's Transactional Model of Stress and Coping (1984). The Transactional Theory of Stress and Coping (TTSC) by Lazarus (1966); Lazarus and Folkman (1984) is the basic theory supporting this study.

#### **Theoretical Frameworks**

This part of the research discusses the theoretical frameworks that are relevant to the current study. The study was underpinned by the transactional theory of stress and coping.

#### The Meta-Model of Stress, Emotions and Performance

Fletcher et al. (2006) recommended the meta model of stress, emotions and performance to show how stress, emotions and performances are related. This model proposes a superordinate and integrative viewpoint of the stress process and how it relates with the performance of individuals considering organisational, personal and competition stressors that individuals in highly demanding performance environments experience (Fletcher et al., 2006). The basic explanation of this theoretical model is that stressors emanate from within the performer's environment and are mediated by appraisals, perceptions and coping and subsequently leads to negative or positive reactions, feeling states, outcomes and feeling states (Fletcher et al., 2006).

The model is divided into three separate phases: Person-Environment (P-E) fit, which proposes that the effect of stress (strain) appears as an asymmetry between an individual and individual's environment, Emotion-Performance (E-P) fit reveals that if an emotion and a performance are not balanced, it might lead to bad sentiments, whereas Coping and Overall Outcome (COO) focus on how individuals cope with these responses or reactions. The coping and overall coping (COO) stage proposes that a negative consequence would occur when coping strategies are not adequately or sufficiently utilised. The cognitive process of individual coping that leads to total coping outcomes is very important. The meta-model proposes that the continuing transactions are affected by many personal (perceived control, affect and self-confidence) as well as situational factors (autonomy, feedback and social support) in the organization (Fletcher et al., 2006).

## The Transactional Theory of Stress and Coping

Transactional Model of Stress and Coping (Lazarus & Folkman, 1984) views stress not as an explicit pattern of physiological, subjective or behavioural responses, but as a dynamic bi-directional transaction occurs between people and their environments. Individuals in psychological stress relate to their environment and consider it as significant for their well-being when the demands exceed their coping capabilities (Lazarus & Folkman, 1986, p. 1). The stress process noted by Lazarus (1999) and Lazarus and Folkman, (1984) include the environmental demands (stressors) individuals experience, how they appraise these demands (stressors) and an assessment of the personal resources (goals, beliefs, competence level, self-confidence, self-efficacy, sense of being in control, effective leadership skills) available to them in order to deal with the stressors (Cooper et al., 2001; Lazarus, 1999) and the use of particular methods for coping.

Lazarus and Folkman, (1984) identified appraisal as a significant feature that influences the stress process. Appraisal is seen as the way individuals evaluate their environment relative to their individual goals, values and beliefs (Lazarus, 1999) and categorise cognitive appraisals into two namely; primary appraisals and secondary appraisals. With the primary appraisal stage, individuals view situations either as irrelevant to their wellbeing, benign-positive or as stressful. People do not feel stressed when there is no goal at stake or no importance of or relevance of a particular situation or event (primary appraisal) (Lazarus, 1999). In addition, a benign-positive appraisal which occurs when an encounter is interpreted to result in positive

outcomes and well-being and is associated with emotions that are pleasurable like happiness, joy and love may also not lead into stress.

When there is a goal at stake or an important event that is a demand from the environment in which a person operates, and the resources to manage such demands are insufficient, there is a risk of stress, which can lead to unpleasant emotions such as anxiety if appropriate coping strategies are not used (Fletcher et al., 2006; Lazarus, 1999; Lazarus & Folkman, 1984). Meanwhile, Fletcher and Scott (2010) indicate that stress can be adaptive and maladaptive and this depends on how the individual appraises that particular event or stressor and that a person can view a demand possibly as an opportunity or a problem or as one or the other or as none of them (Mcgowan et al., 2006).

Lazarus and Folkman (1984) further suggest that if an individual has more or equal resources than the demands placed on them, they will not feel stressed (primary appraisal stage), hence, the secondary stage of appraisal will not matter because they can cope better (Lazarus, 1999; Lazarus & Folkman, 1984). However, if people realise that demands put on them are more than the resources available to deal with those demands, they may feel stressed (primary appraisal stage). The coping resources at their disposal are next reviewed (secondary appraisal stage) before eventually applying the coping strategy at their disposal (coping stage) to deal with the circumstance (Lazarus, 1999; Lazarus & Folkman, 1984).

Lazarus and Folkman (1984) explain coping as constantly changing cognitive and behavioural efforts to deal with particular internal and or external pressures that an individual appraises as beyond individual's available

resources or an effort to regulate psychological stress. Furthermore, Folkman and Moskowitz (2004) state that coping is the "behaviours and thoughts which people adopt to control the external and internal demands of events that they interpreted as stressful." During this stage of the stress process, people use emotion-focused coping or problem-focused coping (Lazarus & Folkman, 1984).

Therefore, a stressor could be interpreted as threatening, harm/loss or challenging based on individual differences in vulnerability and sensitivity to situations. The individual's interpretations, feelings and reactions to these encounters may differ as well based on their personal resources (Lazarus, 1999; Lazarus & Folkman, 1984). This theory thus emphasises that stress involves stressors from the environment, how the stressors are evaluated and the coping strategies they use. The relationships and interactions determine whether its effect would be debilitative or otherwise to the individual involved.

### Coach-Athlete Stressors

Researchers have observed that participation in professional sport is highly stressful for sport performers (Cosh & Tully, 2014; Fletcher et al., 2006; Fletcher & Scott, 2010; Mellaliue et al., 2009; Thelwell et al., 2008). In congruent with Lazarus and Folkman (1984)'s Transactional Model of Stress and Coping, stress can be seen as, "A connection that exists between an individual and individual's environment that appraises as important to individual's well-being with the individual's resources exceeded" (Folkman & Lazarus, 1985, p. 152). Many researchers have identified stressors associated with elite-level sport.

Stressors can emanate from both the organisation and the competition environment (Fletcher, Hanton & Mellalieu, 2006). For example, in a study about coaches' stressors, Thelwell et al. (2008) identify about 182 stressors which emanated from the competition environment (e.g., opponents, athletes' coach-ability, competition preparation, training performance, competition performance, competition schedule, attitude, injuries) specific to athlete experiences. Similarly, coaches own performance stressors involve competition preparation, competition itself, training, expectations, post-competition, officials and opponents (Thelwell et al., 2008). Further, some of the organisational stressors of the coaches included, but not limited to training environment, selection, team atmosphere, competition environment, travel, finances, athletes, other coaches, communication and roles (Thelwell et al., 2008).

From athletes' performance stress literature, elite athletes encounter preparation, injury, expectations, opponents, coach issues and self-presentation related challenges while their organisational stressors may include facilities, spectators, officials, format of competitive season, roles and other athletes (Mellalieu et al., 2009). A critical examination of the organisational and performance stressors for coaches and athletes by Thelwell et al. (2008), Mellalieu et al. (2009) and Kristiansen et al. (2012) reveal that the organisational and performance stressors of coaches and athletes have some similarities (e.g., athletes' preparation, injury concerns, coach issues, opponents, officials, expectations and roles, and others, such as leadership, team issues as well as communication in that many stressors that coaches experience are also experienced by athletes both in performance and

organisational environment. Levy et al. (2009) did a longitudinal research on organisational stressors, coping and coping effectiveness with an elite coach, an inductive and deductive content analysis. The results from their study indicate that stressors, such as leadership issues that involve the athletes, other coaches and organisations, team issues that involve communication, support, team atmosphere and squad concerns, and environmental issues that involve competition environment (preparation for competitive games), training environment (preparation for training sessions), travel (transport problems, long distance travel) and administration issues that involve meeting with management and performance directors. These evidences provide support for the link between coaches and athletes organisational and performance stressors.

Hanton et al. (2005) further reveal that elite performers encounter more stressors related to their organisations than stressors related to performance and argued further those organisational stressors are more likely to vary across elite performers while performance-related stressors could be more comparable across elite performers. Research evidence suggests that coaches are likely to experience more organisational stressors than performance stressors (Fletcher & Hanton, 2003).

Literature suggested many environmental stressors that athletes experienced in performance situations as a result of their coaches. They include 'relationship with the coach', the coach's competence, negative feedback, a controlling coach, high expectations and lack of social support. Also, athletes experience organisational stressors from coaches, such as selection issues, communication issues, leadership, training environment and

roles (Didymus & Fletcher, 2017; Kristiansen et al., 2012; Mellalieu et al., 2009; Noblet & Gifford, 2002; Scanlan et al., 1991; Woodman & Hardy, 2001) (Lazarus, 1999; Nicholls et al., 2016, 2009; Weinberg & Gould, 2015). For example, in assessing stress experiences among Norwegian Olympic athletes at the 1994 Winter Games in Pensgaard, Ursin (1998) found out that athletes mentioned their coaches as major stressors to them indicating unrealistic expectations, lack of information and personal conflict with the coach as some of the things that stress them. Holt and Hogg (2002) conducted a similar research to identify stressors among female soccer players during a World Cup Finals situation felt that a major source of their stress is their coach's lack of communication and negative feedback while Fletcher and Hanton (2003), and Woodman and Hardy (2001) reveal that elite athletes feel anxious over their coaches expectations and the athletes agreed that when their coaches evaluate them negatively and put pressure on them to perform, they find it very stressful.

Moreover, in examining organisational stressors and coping among U.S professional Soccer players, athletes mentioned that poor coach-athlete interactions are a major stressor to them as individuals and as a team and that the coach is responsible for setting standards and uniting and dealing with individual and team issues and that the performance of the team largely depends on the coach. In a more specific manner, McCann (1997) indicated how easy it was for athletes to identify their coaches who were under stress. When the anxiety of the coach becomes very obvious, it may lead to a reduced confidence among his athletes. Noblet et al. (2003) noted that having control and social support at the workplace can significantly predict psychological

well-being and job satisfaction among professional footballers. Similarly, the relationship of the coach plays a vital role in creating a conducive atmosphere in individuals and the team. If players will unite and perform optimally, it largely depends on how coaches interact with them (Kristiansen et al., 2012). According to Lazarus and Folkman (1984), individuals appraise similar situations differently probably because of their level of vulnerability and sensitivity to those situations. For example, while an individual may respond to a stressor with aggression, another individual may respond with calmness. These situations determine individual differences in relation to challenge or threat appraisals which largely depends on the resources available to that individual.

Many researchers have conducted numerous studies on the stress experiences of athletes (Arnold et al., 2016; Gould et al., 2002; Hanton et al., 2005; Mellalieu et al., 2006; Wagstaff & Fletcher, 2012; Woodman & Hardy, 2001) as well as coaches (Fletcher & Scott, 2010; Kristiansen et al., 2012; Olusoga et al., 2009; Thelwell, 2012). However, literature reveals coaches' performance stressors from their athletes, such as athletes training performance, athletes coach ability, athletes' injuries and athletes' competition performance while their organisational stressors from athletes include athletes' roles, Communication, selection issues and team atmosphere (Fletcher & Scott, 2010; Thelwell et. al., 2008). Interestingly, the coach stress literature also reveals several situations where coaches cite their athletes as a major stressor to them. For instance, Thelwell et al. (2008) found out in their research that coaches encounter an approximation of 50% of the stressors they experience in performance environment through their athletes since they (the

coaches) find it difficult to control the athletes. Furthermore, Frey (2007), in her study, reveals that a respondent in her study becomes unapproachable to her athletes when she is under stress and the athletes do not discuss any issues with her. Fletcher and Scott (2010), on a follow-up to the above assertion, argue that such an unapproachable behaviour by a coach can compromise the ability of the coach to instruct her athletes in developing skills and improving performance while their emotions are also likely to be transmitted to a certain extent to their athletes. According to Jowett and Cockerill (2003), this can adversely affect athletes and lead to lower coach satisfaction and poor performance outcomes. It is therefore reasonable to argue that the stress experiences of coaches can affect their athletes and vice versa and that the interactions that occur between coaches and athletes are very instrumental in building a conducive working relationship and atmosphere between coaches and their athletes.

Meanwhile, Lazarus and Folkman (1984) stipulate that a cognitive appraisal of a person's potentially taxing event will affect the interaction that occurs between personal factors for coaches (self-efficacy and being in control) and athletes (being in control and self-confidence) and situational (the environment, interactions with others) factors and that strain does not occur from the individual or the environment only instead, by an imbalance with each other (Edwards & Rothbard, 1999; Lazarus, 1999) and Karageorghis (2011) observes that the stress that associates with sport, in itself, is not damaging.

According to Fletcher et al. (2012), research works have focused on how athletes respond to stressors in the organisation. The outcome of such

studies generally discovered that athletes do not react apathetically to stressors in the organisation; they react to the stressors with varied behaviours, attitudes and emotions. Fletcher et al. further reiterated that whereas undergoing some organisational stress is unavoidable, it does not automatically imply that psychological and athletic penalties will always be damaging. Following this interesting finding, Fletcher et al. (2012) asked, "What are the cognitive strategies supporting, and the theoretical associations surrounding, the behavioural and psychological responses of sport performers?" The authors further concluded that "if scholars are to actually get to the 'theoretical heart' of the stress progression in sport, then our diagnostic lens required to have a more abruptly focus on the sports performers' cognitive evaluations of the organisational stressors they come across".

## Cognitive Appraisal

In the transactional perspective of stress, cognitive appraisal is a pivotal and central concept (Lazarus & Launier, 1978). This notion denotes to how one appraises one's interaction with the social environment. People continually appraise the essence of what is occurring in connection with its consequences for healthy behaviours and what needs to be done consequently. In the framework of organisational stressors in sport, cognitive appraisal entails determining the significance of a stressor signal, such as a confrontation with management, as well as its personal significance for well-being. If the disagreement is regarded meaningful, the athletes assess whether they have sufficient personal supplies available to deal with the stressor indication (Fletcher et al., 2006). Other situational elements have been shown to impact the stress appraisal process. Constraints, culture, opportunity and

demands are examples of these. Individual elements include objectives and goal hierarchies, world and self-ideals and personal belongings (Lazarus, 1999).

Lazarus and Folkman (1984) identified two types of appraisal that are both important: primary appraisal and secondary appraisal. Primary appraisal refers to the type of appraisal made by a person about what is at risk in comparison to goal commitments, beliefs, values and situational intentions about the world and self, all of which provide significance and meaning to a situation (Lazarus, 1966). Lazarus and Folkman (1984) proposed three types of primary appraisal: irrelevant appraisals, which are conditions that are appraised as neither harmful nor threatening, nor of potential benefit to the person; benign-positive appraisals, that are assessments of potential improvement in the individual's well-being; and stressful appraisals, which are situations that pose a significant threat to the individual's well-being.

Apperceptions of loss/harm (i.e. damage to one's values, beliefs, or goal has occurred), threat (i.e. damage to one's beliefs, values, or goal), or challenge (i.e. the person remarks positively a hindrance towards their beliefs, goals, or values), which may occur instantaneously and simultaneously, are examples of stressful circumstances. It has been argued that challenge assessments occur when the condition does not need significant effort and when a sense of control is evident (Lazarus & Folkman, 1984).

If a situation is given significance, it necessitates further investigation. This is for the individual to determine and identify the accessibility of coping resources, as well as the potential usage of such resources. Secondary appraisal refers to this process of abstraction, which is similar to a resource

inventory. According to Lazarus and Folkman (1984), emotion-focused coping (or efforts to cope with an individual's emotional reaction to the stress) will occur if a stressor is adversely assessed (i.e., damage or threat) with limited means to alter it.

However, if the situation is assessed as having potential ameliorative effects via action (i.e., challenge), problem-focused coping energies (or those meant to cope with or modify the true stressor) will be used. Lazarus' appraisal-centered transactional theory of stress has remained popular among scholars outside of sport psychology (e.g., psychology, industrial, organisational and work). More of the research focused on people's perceptions of workplace pressures (Frederikson & Dewe, 1996a; Troup & Dewe, 2002). Without doubt, these studies suggest that the organisational context may impact individuals' appraisals of coping options, and hence, their coping reaction and result (Oakland, 1991).

Outside of sport psychology, Lazarus' appraisal-centered transactional theory of stress has remained popular among academics (e.g., psychology, industrial, organisational and work). More of this study has concentrated on people's perceptions of job stressors (Frederikson & Dewe, 1996a; Troup & Dewe, 2002). Without doubt, these studies have demonstrated that individuals' perceptions of coping alternatives, and hence, their coping reaction and outcome, may be influenced by the organisational environment (Oakland, 1991).

Dewe (1992) discovered that primary appraisals of work stressor indicators in relation to their influence on the organisation or work-group, a desire to be healthy, and concern about job safety, with supposed control over

stressors developing as a significant mediating variable in subsequent research. Secondary appraisals were defined as assessment procedures which action could be taken, action could occur after contemplation, and there was nothing or little the individual could do. Troup and Dewe (2002) recently revealed that key appraisals of job stresses are related to threats to self-esteem, emotions of discomfort, feelings of losing respect for a person, and a sense of failing to achieve an important objective. They also discovered negative correlations between perceived control and damage as well as threat appraisals.

With relation increasingly prevalent the appearance organisational-related themes in the elite sport literature (Fletcher & Wagstaff, 2009; Wagstaff et al., 2012), and current consideration given to appraisallinked concepts (Nicholls, Levy, Jones, Rangamani & Polman, 2011), and emotions (Neil, Hanton, Mellalieu, & Fletcher, 2011) related to sport stressors, it is bewildering that no recognised study in Ghana has studied performers' evaluations of coaches and athletes organisational and performance stressrelated issues. Meanwhile, research has shown that environmental factors (e.g., a coach's negative comments) can cause both negative and positive reactions in athletes (Anshel & Delany, 2001), and that athletes exposed to these stressors have high levels of threat, moderate levels of harm, and low levels of challenge (Anshel, Jamieson & Raviv, 2001). Negative match communication and preparation issues, according to Campbell and Jones (2002), lead to more positive appraisals (i.e., challenge), but negative coach behaviour or style, relationship problems, demands, or expenses lead to more negative assessment (i.e., threat or harm/loss). Holt and Dunn (2004) revealed that evaluation approach and coping methods are closely linked to an individual's objectives and relate in a recursive, transactional fashion in a longitudinal study employing diary techniques. It is indeed worth noting that Holt and Dunn (2004) emphasised the relevance of longitudinal study designs, citing the use of daily records as a key method for identifying explicit oscillations in stress processes.

According to Ben-Ari, Tsur, and Har-Even (2006), perceived high levels of bureaucratic justice on teams were connected with the use of challenge appraisal approach, dedication and team loyalty among athletes in Israeli. Workplace stress literature has emphasised the possibility of appraisal patterns impacting the experiences of sport performers of stress in their sport facilities. There have undoubtedly been multiple recommendations in the sport psychology literature for future research or scholars to study the fundamental stress appraisals associated with the players' experiences of organisational stress (Fletcher et al., 2012; Fletcher et al., 2006, Levy, Nicholls, Marchant, & Polman, 2009).

## **Coping in Sport**

Research in sport literature that in order to overcome the stressors accompanying elite-sport competitions, sport performers are obliged to adopt a diversity of coping approaches. Coping has been described in existing sport psychology scholarship as either a trait approach, indicating that people have consistent coping strategies with which they deal with a variety of stressors (Penley, Tomaka, & Wiebe, 2002), or as a transactional or process approach, describing the coping mechanisms used that are explicit to the stressor and cognitive evaluation strategy thereof (Lazarus, 1999).

There are a number of macro-dimensions of coping that have been proposed. Lazarus and Folkman (1984), for example, distinguished between problem-focused coping (i.e., approaches to resolving or reducing the barrier) and emotion-focused coping (i.e., approaches to reducing negative distress/emotion). Other studies have suggested that coping falls into three categories: task-oriented, disengagement-oriented and distraction-oriented (Compas, Connor-Smith, Saltzman, Harding Thomsen, & Wadsworth, 2001), whereas avoidance coping (i.e., eliminating cognitive or self-distancing; e.g., Anshel, 2001) and appraisal-focused coping (i.e., reexamining the condition to reduce its importance; Cox (Cosh & Tully, 2014).

According to Nicholls and Polman (2007), sport performers may evaluate a variety of potential stressors, including psychological pressures, lack of confidence, fear, pain, coach stress, athlete stress and the difficulties of performing sport (Dale, 2000; Eklund & Jackson, 1993a; Fletcher & Scott, 2010; Gould, Nicholls, Holt & Polman, 2005a; Holt & Hogg, 2002; Nicholls & Polman, 2007). Coping with stress is an important aspect in coaches' and athletes' ability to properly operate in a variety of sporting performances (Fletcher & Scott, 2010; Lazarus, 2000a; Lazarus & Folkman, 1984). There is widespread agreement in the sport psychology literature that coaches and players of all skills and ages should be able to cope with both organizational and performance stresses in order to make sport a pleasurable experience (Fletcher et al., 2006; Lazarus & Folkman, 1984; Mellalieu et al., 2009).

In the existing literature, there are numerous descriptions and definitions of coping. The process and attribute perspectives are the most prominent in the sport psychology literature. Persons are classified using the

trait method based on their consistent coping techniques, which are frequently tested through questionnaires or interviews (Penley, Tomaka, & Wiebe, 2002). Carver, Scheier and Weintraub (1989) added that the trait approach is based on an assumption that "people do not approach each coping scenario anew, but rather exhibit an ideal set of coping procedures that remains fairly static across circumstances and time" (p. 270). The trait approach is repeated in the question phrase in which respondents are asked what they generally do to manage an issue (Aldwin, 1994).

The transactional or process approach, advocated by Lazarus and Folkman (1984), and Lazarus (1999) contends that stress coping is a recursive and dynamic process comprised relations between an individual's internal (i.e., beliefs about values, goals, and self) and external (i.e., situational) settings (Lazarus, 1999). From this viewpoint, Lazarus and Folkman (1984: 141) described coping as "continuously varying behavioural and cognitive efforts to cope with explicit internal and/or external stress demands that are evaluated as exceeding or taxing the resources of the individual." Primary and secondary appraisals were identified as essential elements in the stress appraisal and coping connection by Lazarus and Folkman (1984) and Lazarus (1999). The primary evaluation focuses on whether a scenario or occurrence is seen to be relevant to values, goal commitments, self-beliefs, and situational intents.

Most importantly, a commitment goal has been regarded as a lifethreatening factor, as the non-existence of goal commitment leads to no adaptational significance at stake in a specified condition to incite a stress response (Lazarus, 1999). For example, if an interaction is deemed significant to the individual and has the potential to jeopardize the individual's wellbeing, there are four different assessments. Harm/loss refers to harm that has already occurred, whereas danger refers to potential future damage. When people feel enthusiastic about a subsequent struggle in a difficult encounter, this is referred to as a challenge (Lazarus & Folkman, 1984). Secondary appraisal is the cognitive assessment process of the coping options available to the person, particularly when loss/harm or threat is assessed. Secondary appraisal, according to Lazarus and Folkman (1984), is not real coping, but the circumstance which the individual assesses numerous alternatives accessible to them to cope with the stressor, following which the actual coping technique is adopted at the coping stage (Nicholls & Polman, 2007).

#### **Coping Categories and Dimensions**

Sport performers may employ a variety of coping mechanisms to deal with difficult situations. Scholars have identified higher-order coping processes that discriminate between various coping techniques based on their goal and function (Crocker, Kowalski & Graham, 1998). Emotion and problem-focused coping has been the most commonly employed coping mechanisms. Problem-focused coping solutions are offered to alter stressful events/activities, whereas emotion-focused coping addresses the emotional distress linked with the experience (Lazarus & Folkman, 1984). Nonetheless, various macro-level coping methods are already being planned.

Avoidance coping includes both behavioural (e.g., removing oneself from the circumstance) and psychological (e.g., cognitive distancing) efforts to remove oneself from a stressful situation (Krohne, 1993). Approach coping is opposing the stressor and attempting to minimise it consciously (e.g., taking direct action, intensifying efforts and planning) (Roth & Cohen, 1986).

Appraisal-focused coping entails re-appraising an incident in order to decrease its significance as well as methods, such as re-structuring the situation (Cox & Ferguson, 1991).

These wide-ranging mechanisms of coping are beneficial due to the fact that they offer a complete account of players' response to stressful situation (Nicholls & Polman, 2007). Nevertheless, they comprise the complexity and heterogeneity of the diverse sub-types of coping reactions (Compas, Connor- Smith, Saltzman, Harding Thomsen & Wadsworth, 2001). At the micro level, the higher-order coping dimensions can be regarded by a variety of explicit coping subtypes or categories. On the basis of component analyses or theoretical item groupings, these coping groups have been grouped into subtypes of the larger dimensions of coping (Compas et al., 2001). Problem-focused coping encompasses several forms of coping such as goal setting and goal setting, information searching and forceful confrontation (Nicholls & Polman, 2007). Wishful thinking, seeking emotional support and relaxing are all examples of emotion-focused coping.

Many studies on coping in athletics have been published by scholars since early 1990s. Scholars have identified coping as a very important aspect in satisfaction and performance, owing to the awareness that coping research has the potential to effectively contribute to functional practice (Lazarus, 2000a; Lazarus & Folkman, 1984). According to the literature, less effective stress coping strategies can result in withdrawal from sporting activities (Klint & Weiss, 1986; Smith, 1986), decreased performance (Lazarus, 2000a), and performers' inability to pursue careers in professional sport (Holt & Dunn, 2004a). As a result, a greater knowledge of coping strategies in sport is critical

for sport psychologists, applied practitioners and researchers, coaches and players. Extensive coping literature studies will be a fantastic way to establish the generalizability of empirical results across study contexts and demographics (Murlow, 1994).

#### Research on Coach-Athlete Stress

Stressors can be facilitative or debilitative to coaches and athletes' emotions, behaviours, performances, psychological well-being and job satisfaction depending on how coaches and athletes appraise these stressors in relation to their personal resources (values, beliefs, goals) available to cope with the particular stressor (Arnold et al., 2016; Fletcher et al., 2006; Fletcher & Scott, 2010; Kristiansen & Roberts, 2010; Lazarus & Folkman, 1984).

Findings emanating from both athletes' and coaches' stress literature indicate that while the coach is a stressor to the athlete (Hanton et al., 2005; Kristiansen et al., 2012; Mellalieu et al., 2009), the athlete is also a stressor to the coach (Fletcher & Scott, 2012; Levy et al., 2009; Olusoga et al., 2009, 2010; Thelwell et al., 2008, 2012) and this has a potential of ruining or strengthening the coach-athlete relationship, and performance outcomes. Previous research has revealed that stress may be detrimental to coaches' psychological resources, limiting their desire to attend to their athletes' needs and, as a result, disrupting the link that should exist between the coach and his players (Mageau & Vallerand, 2003).

Further evidence suggests that coaches and their athletes closely work together and mostly form relationships that last longer and are mutually dependent. Therefore, the way coaches and their athletes interact with each other can have a great influence on their effectiveness during training regimes

and this relationship can directly or indirectly affect their level of motivation, satisfaction and enjoyment in performing their sport. This can only be accomplished if coaches and athletes have a positive relationship. Meanwhile, it is indicated that a hostile relationship is more likely to result in an unfulfilling and unsatisfying performance (Papaioannou & Hackfort, 2014). For instance, in Frey's (2007) research, a coach indicates that she becomes unapproachable leading her athletes avoiding her when she experiences stress. Therefore, a healthy coach-athlete relationship impacts positively on the performance satisfaction of the athletes (Nicholls et al., 2016).

According to Didymus and Fletcher (2017), elite performers' challenge appraisals are consistently related to performance satisfaction, whereas threat appraisals are usually related to performance dissatisfaction. Similarly, Eklund and Tenenbaum, (2014) explain satisfaction as "a positive cognitive affective position that emanates from a cognitive judgment process that what is being experienced exceeds the standard of the person. Satisfaction among athletes' associates with team cohesion, team motivation, the teaching and learning atmosphere, coach-player compatibility and relationships, and rehabilitation of injury". Furthermore, Reimer and Chelladurai, (1998) reveal that satisfaction of athletes is very complex and can include evaluating many standards that associate with a relationship between coaches and athletes, the organization, the team and the individual.

Despite the standards linked with the team's achievement and the person seem obvious, other exclusive aspects that associate with the team and the athlete exist. Team issues can involve integration of the team, treatment of the athlete by the team and how teammates exhibit ethical behaviours.

Standards of individuals involve personal dedication, social contribution to them, and task. Another important factor to the satisfaction of athletes is leadership. The way the coach conducts training sessions and instruction, how he makes use of the athlete during training and competition, how he develops strategy and the way he treats the athletes are all elements of satisfaction among the athlete population. Several of the features above affect the quality of the coach-athlete relationships. Additionally, there are many features that associate with the sport organization. They include academic support, financial support as well as quality medical support. According to Reimer and Chelladurai (1998), the standards that link with the sport organisation may differ widely based on the competition level and the structure of the organization (e.g., professional sport community groups and educational institutions) and since there are several distinct features that associate with satisfaction of athletes, their level of satisfaction can vary, with them showing satisfaction with some features and showing dissatisfaction with other features (Reimer & Chelladurai, 1998). Therefore, if coaches and athletes learn to positively appraise stressors and effectively cope with these stressors, it will create a healthy coach-athlete relationship and thus increase performance satisfaction and psychological well-being among them.

# Summary

Professional sports place extreme demands on coaches and athletes in their quest to achieve a common goal. Research indicates that the complex nature of the environment within which elite coaches and athletes operate exposes them to many stressful situations due to the many demands (stressors) that are placed on them. These stressors can negatively affect individuals' emotions, behaviours, performance outcomes and general psychological wellbeing (Fletcher et al., 2012; Fletcher & Scott, 2010; Gould et al., 2002; Hanton et al., 2005; Mellalieu et al., 2009; Noblet et al., 2003; Olusoga et al., 2009; Tabei et al., 2012; Thelwell et al., 2008), if these persons are unable to evaluate the stressful situations positively and find their corresponding coping strategies (Arnold et al., 2016; Fletcher & Scott, 2010; Lazarus, 1999; Olusoga et al., 2010). Moreover, other researchers also indicate that when the coach is under stress, it can negatively affect his athletes and lead to poor performance outcomes and satisfaction (Jowett & Cockerill, 2003). Literature on the psychology of elite sport performance has increasingly stressed the relevance of researching the transactional character of sport performers' (athletes and coaches') stress experiences in the context in which they occur (Fletcher & Wagstaff, 2009; Wagstaff, Fletcher, & Hanton, 2012). Academics in the subject of organisational psychology have thoroughly examined the relationships between employees' well-being, health and performance (e.g., Sparks, Faragher, & Cooper, 2001).

A major variable of interest in this line of research has been organisational stress, which has been defined as "a continuing transaction between a person and the environmental stresses connected directly and principally with the organization within which he or she is functioning," and competition stress, which has been defined as "an ongoing transaction between a person and the environmental stresses connected directly and principally with the competition setting within which he or she is functioning" (Fletcher, Hanton & Mellalieu, 2006, p. 329). For the past 10 years and over, sport psychology researchers have examined the performance and overall

organisational stressors that elite coaches and athletes encounter (see Fletcher & Hanton, 2003; Fletcher et al., 2012; Hanton, Fletcher & Coughlan, 2005; Woodman & Hardy, 2001), their reaction and evaluation of these stressful demands (Fletcher, Hanton, & Wagstaff, 2012), and how they handle these



#### **CHAPTER THREE**

#### **RESEARCH METHODS**

The purpose of this study was to assess stress appraisals and coping styles among Ghana Premier League coaches and players in 2020/2021. Areas that were covered in this chapter included the research design, study area, population, sampling procedure, data collection instruments, data collection procedure, data processing and analysis and a summary of the chapter.

# **Research Design**

The philosophical assumption that underpinned this research was positivism while the research approach used was quantitative. For this study, a descriptive cross-sectional survey approach was adopted. Descriptive cross-sectional survey design was deemed suitable for the study because of its advantage in producing good responses from a vast range of individuals in one single study and also provides a meaningful picture of situations and explanations about the views and behaviours of people on data gathered (Kuranchie, 2016). The data generated from questionnaires were organised and presented systematically to arrive at good conclusions (Kuranchie, 2016).

Lastly, this design was concerned with existing situations or relationships, such as determining practices, aptitudes and views, ongoing processes or emerging trends (Best & Khan, 1998). Additionally, this research design comprised collecting data in order to describe the state, magnitude and form of a phenomenon at a specific time (Creswell, 2012). However, the weakness of this design was that it could not examine how a particular variable affected the other.

# **Study Area**

This study covered a wide geographical area in Ghana since there was a total of eighteen teams in the 2020/2021 Ghana premier league. These teams were spread from the Northern to the Southern and Eastern to the Western parts of Ghana. Specifically, the premier league clubs included Ashanti Gold Football Club in a town called 'Obuasi' while Asante Kotoko and King Faisal Football Clubs were located in Kumasi in the Ashanti Region of Ghana. In addition, Legon Cities, Inter Allies, Accra Hearts of Oak, Liberty Professionals and Accra Great Olympics Football Clubs were located in Accra, the capital city of Ghana while Aduana Stars, Berekum Chelsea and Bechem United Football clubs were located in towns called Dormaa Ahenkro, Berekum and Bechem in the Brong Ahafo Region of Ghana respectively. Moreover, Medeama Football Club in Tarkwa and Karela Football Club in Ayinase townships were both in the Western Region of Ghana while the West African Football Academy in Sogakofe town was located in the Volta Region of Ghana. Eleven Wonders in Techiman was in the Bono-East Region of Ghana while Abusua Dwarfs in Cape Coast and Elmina Sharks in Elmina were both located in Central Region of Ghana. Dreams Football Club was also located in a town called Dewu in Eastern Region of Ghana.

# Population

This study's population was divided into two groups. All of the coaches for the 2020/2021 Ghana football premier league were in one group. The second group consisted of all players from Ghana's main league in 2020/2021. The estimated size of the population for this study included a minimum of 540 players and 54 coaches making a total of n=594. The entire

population was made up of males with ages ranging from 16 years to 31 years for players and 31 years to 70 years for the coaches while years of experience for players ranged from 1 year to 15 years and 1 year to 17 years for coaches. Majority of coaches and players were employed on contract basis. For a coach to qualify to coach in any of these teams, he or she should have a football License 'A', with 5 or more years of professional experience and records of successful performances. Players were also selected based on their performance records without any strict criteria for selection into the teams.

# **Sampling Procedure**

The sample size for this study included the whole population of coaches and players that competed in the Ghana Premier League in 2020/2021. Although a total of 594 participants including 540 players and 54 coaches were initially sampled for the study, valid responses received were 424 (78.5%) from players and 44 (81.5%) from coaches making a total sample of 468 for the study with one club (Asante Kotoko) voluntarily withdrawing from the study. For true representativeness, census was used because the population size was small and would not have been appropriate to be sampled further considering the research design of the study (Gay, Mills & Airasian, 2009). Therefore, involving almost all players and coaches in the 2020/2021 premier league teams largely influenced the reliability of this research and allowed for some generalizations to be made about the target population (Creswell, 2012).

#### **Data Collection Instruments**

For this study, three distinct standardised instruments were employed to collect data from the Ghana Premier League's 2020/2021 football coaches and players.

# Organizational Stressor Indicator for Sport Performers (OSI-SP; Arnold et al., 2013)

A 23-item Organizational Stressor Indicator for Sport Performers (Arnold et al., 2013) was administered to research participants (coaches and players) to assess the organisational pressures they faced while competing in the 2020/2021 premier league a month ago. Initial instructions on the instrument informed participants to demonstrate honesty and openness. Those who represented two or more teams were told to complete the OSI-SP considering the team they mostly competed for in the past month. The OSI-SP has five subscales which include 6-items for Goals and Development (e.g., "my goals"), 9-items for Logistics and Operations (e.g., "the training or competition venue"), 4-items for Team and Culture (e.g., "the atmosphere surrounding my team"), 2-items for Coaching (e.g., "the relationship between my coach and I") and 2-items for Selection (e.g., "selection of my team for competition"). For each item, the stem "In the past 1 month, I have experienced a pressure associated with . . . " is given to which every participant answered on only the intensity rating scale with options that ranged from 0 =("No demand"), 1 = ('Very low demand"), 2 = ("Low demand"), 3 = ("Moderate demand"), 4 = ("High demand") to 5 = ("Very high demand"). The intensity dimension of the scales involved ("how demanding was this pressure?"). Arnold et al. (2013) produced and validated this instrument in a series of studies. Reported internal consistency values for the intensity dimension using the Cronbach's alpha coefficient values ranged from 0.71 to 0.83.

# Stress Appraisal Measure (SAM; Peacock & Wong, 1990)

The Stress Appraisal Measure is a 28-item instrument that examines six appraisal dimensions, comprising primary and secondary appraisals. The key appraisals are challenge (e.g., Is this going to have a good influence on me?), threat (e.g., Does this scenario tax or surpass my coping resources?) and centrality (e.g., Does this situation have significant ramifications for me?). Higher-order dimensions, such as controllable-by-others (e.g., Is there help available for dealing with this problem?), controllable-by-self (e.g., Will I be able to overcome the problem?), and uncontrollable-by-anyone (e.g., Is the outcome of this situation uncontrollable by anyone?) are assessed for secondary appraisals. After measuring relational meanings of primary and secondary appraisals, the overall perceived stress that individuals reported were calculated.

Every item on the measure was rated on a 5-point Likert type scale which ranged from 1 = "Not at all", 2 = "Slightly", 3 = "Moderately", 4 = "Considerably" to 5 = "Extremely." The Crombach's alpha coefficients values for the SAM were reported by Peacock and Wong (1990) as ranging from .74 to .90. They later found Cronbach's alpha coefficients in another study to range from .64 to .88.

#### Modified COPE (MCOPE; Crocker & Graham, 1995)

The MCOPE a 48-item survey questionnaire with 12 sub-scales was used to assess participants' coping skills when confronted with a stressful

circumstance. Planning, active coping, increased effort, seeking social support for instrumental reasons, suppression of competing activities, humour, seeking social support for emotional reasons, self-blame, venting emotion, wishful thinking, denial, and behavioral disengagement are among the 12 sub-scales. In all, 29 items from seven coping sub-scales were employed. Under problem-focused coping, they included planning ("I thought hard about what steps to take to manage this situation"), active coping ("I tried to improve my effort"), seeking social support for instrumental reasons ("I talked to other coaches/players to find out more about my performance"), increasing effort ("I tried to improve the quality of my performance"), and so on.

For the purposes of this study, three other behaviour patterns were classified as emotion-focused coping: self-blame ("I took responsibility for what had happened"), seeking social support for emotional reasons ("I talked to someone about how I felt"), and emotion venting ("I felt a lot of upset feelings and I showed those feelings a lot"). Because responding to three (3) separate measures (OSI-SP, SAM, and MCOPE) at the same time might have been too much for both coaches and players to reply to given their level of education and dedication to winning the league, 29 items were chosen out of the 48. They had very little time to engage in other issues that were not directly related to the competitive league. Therefore, giving them too many items to respond to could have discouraged them from consenting to take part in the study. The items would have been too many and hence arouse some levels of boredom among the study participants. The participants were asked to indicate on a 5-point rating scale; (1 = "Not at all", 2 = "Used a little", 3 = Used "somewhat", 4 = "Used much" to 5 = "Used very much") about how

they used each style to manage the stresses that they encountered as they participated in the competition. Arnold et al., (2016)'s study on the "Organizational Stressors, Coping and Outcomes in Competitive Sport reported Crombach's alpha values for problem-focused coping as .72 and emotion-focused coping, as .68. The MCOPE has revealed acceptable validity evidences of various scores among sporting populations who used both dispositional and situational instructions for coping (Giacobbi &Weinberg, 2000; Hoar et al., 2006; Lidor et al., 2013).

### Validity and reliability of the instruments

Supervisors of the present study gave their final suggestions on the approval of the instruments based on content and face validity. The statistical package for social sciences (SPSS) software version 22 was used to examine the instrument's internal reliability for contextual appropriateness using pretested data. Cronbach's alpha was used to illustrate the coefficients of the internal consistency of the various instruments after all of the questionnaires were combined. The alpha coefficients for the OSI-SP were as follows: goals and development - .763; logistics and operations - .827; team and culture - .751; coaching - .656; and selection - .661. The alpha for the stress appraisal technique was .761 for primary appraisal and .858 for secondary appraisal. The MCOPE also showed reliability estimates of .841 for problem-focused coping and .752 for emotion-focused coping.

### **Pre-testing of the instruments**

The instrument was pre-tested using coaches and footballers in two (2) clubs in the 2020/2021 division one football league season. In all, the coaches were 6 (3 from each club) and the players were 60 (30 players from each club)

making a total of 66 participants. This was done to help check for homogeneity of characteristics of the main sample. Feedback from the pretested data enabled the researcher to test how valid and reliable the instrument for the current study was.

#### **Data Collection Procedures**

Prior to collecting the data, the researcher sought for approval from the study supervisors, the ethical clearance board, and the Institutional Review Board (IRB) of the University of Cape Coast. An introductory letter was taken from the Department of Health, Physical Education and Recreation (HPER), University of Cape Coast to enable the researcher to collect data from premier league soccer coaches and players. Prior to their involvement in the research, all participants were issued information letter that covered the research data collecting methodologies objective, importance, ethical considerations, such as confidentiality and the safeguarding of participants' image and integrity. Despite the estimated number for the current study, participants were given the freedom to willingly take part in the study. The researcher developed relationships with the individual clubs and educated them on the study's objective to facilitate data collecting. The participants choose the length of time they would spend responding to the questions without pressured by other equally important commitments. The researcher trained all club secretaries, assistant coaches, coaches and five (5) physical education teachers by giving them a detailed description and education on each item on the study measure to enable them help in administering the questionnaires in their various teams. This was done to assure the accuracy of the data that would be collected. The questionnaires were then sent to the

2020/2021 premier league soccer coaches and athletes who signed informed permission forms to participate in the study to reply to and submit to the researcher based on the agreed-upon period for collection. All COVID-19 safety protocols were strictly observed during the face-to-face data collection process. Part of the data was collected from one club to the other at different times at their home grounds while the rest of the clubs sent their answered questionnaires in ceiled brown envelops by post. The duration for the collection of the entire data was within three (3) months.

#### **Data Processing and Analysis**

Data was eye-bawled and statistically tested for multivariate linearity and outliers, missing data, univariate and multivariate normality, multicollinearity and variance-covariance matrix homogeneity. For univariate and multivariate normality, Q-Q plots were used to check whether all data points were closer to the line. To check for linearity assumptions and outliers, scatter plots were used. The Box's M test of equality of covariance matrices was used to assess the homogeneity of variance-covariance assumptions, and multicollinearity assumptions were also examined to establish how the dependent variables were connected. These were done to minimize errors in the actual data to be analyzed. After a successful screening was done, the IBM SPSS statistical software version 22 was used to analyse the screened data.

The demographic information (age and years of experience) of research participants (coaches and players) was evaluated using means and standard deviations. The first study subject looked at whether organisational constraints were common among football managers and players in Ghana's top flight. Means and standard deviations were used to investigate this research

issue. The second research topic looked at the stress appraisal methods that football coaches and players used to evaluate the stresses they encountered in the Ghana premier league. Means and standard deviations were used to investigate this research issue. Third, the study question three investigated the coping techniques employed by football coaches and players in the Ghana premier league. Means and standard deviations were also used to investigate this research issue.

Furthermore, the fourth study question investigated how age and years of experience related to organisational stressor indicators among Ghana premier league football coaches and players. The factorial Multivariate Analysis of Variance (MANOVA) was used to analyse this research question, with age and years of experience as independent variables and the five (5) dimensions of the OSI-SP (Goals and Development, Logistics and Operation, Team and Culture, Coaching and Selection) as dependent variables. The fifth research question discovered a link between stress appraisals and coping strategies among Ghana premier league football coaches and players. Multivariate multiple regression was used to examine this research question. The stress appraisal dimensions used in this analysis were challenge, threat, and centrality as primary appraisals and controllable-by-others, controllableby-self, and uncontrollable-by-anyone as secondary appraisals, whereas the coping subscales used were planning, seeking social support for instrumental reasons, active coping, and increasing effort as problem-focused coping and self-blame, venting of emotions, and seeking social support for emotional reason.

#### **CHAPTER FOUR**

#### **RESULTS AND DISCUSSION**

The purpose of this study was to assess stress appraisals and coping styles among Ghana Premier League coaches and players in 2020/2021. The findings of the analysis are presented in this chapter. The chapter begins with the demographic features of the sample (football coaches and players) and then moves on to data analysis on the research topic. A total of 54 coaches and 540 premier football players were sampled for the study. Out of these selected participants, valid responses received were from 44 coaches and 424 football players. The figures constituted 78.5% and 81.5% response rates for coaches and football players respectively. Thus, the analyses presented are based on data from 44 coaches and 424 football players.

# **Demographic Information of Football Coaches and Players**

Demographic information of the respondents was solicited during data collection. These are years of experience and ages of both the coaches and football players. From the data, the youngest coach was 31 years and the oldest was 70 years. The youngest player was 16 years whereas the oldest player was 31 years. The football coaches varied in experience from 1 to 17 years, while the players ranged in experience from 1 to 15 years. The demographic information is presented in detail in Table 1.

**Table 1: Demographic Characteristics of Football Coaches and Players** 

Demographic Variables	Coaches (n=44)	Players (n=424)
	n(%)	n(%)
Years of experience		
Below 5 years	29(65.9)*	365(86.1)
5-10 years	8(18.2)	57(13.4)
11-15 years	5(11.4)	2(0.50)
16 years and above	2(4.5)	0
Mean ± SD	$5.02 \pm 4.45$	$2.69 \pm 1.82$
Age (Coaches)	FUE	
30-35 years	8(18.2)	
36-40 years	11(25.0)	
41-45 years	4(9.1)	
46 and above	21(47.7)	
Mean ± SD	$42.30 \pm 10.44$	
Age (Players)		
20 years and less	9 -	154(36.3)
21-25 years	4	186(43.9)
26-30 years		78(18.4)
31-35 years	<b>-</b>	6(1.4)
Mean ± SD		$22.36 \pm 3.53$

<sup>\*</sup>Percentages in parenthesis

Source: Field Survey (2020)

As shown in Table 1, a majority of the football players (n=365, 86.1%) and coaches (n=29, 65.9%) had been in the premier league for less than 5 years. Other players (n=8, 18.2%) and coaches (n=57, 13.4%) indicated that they had 5 to 10 years of experience. Although no player had an experience of above 15 years, 2 of the coaches had performed that role for more than 15 years. Comparatively, the coaches (M=5.02, SD=4.4) had more years of experience than the players (M=2.69, SD=1.82).

The data, as presented in Table 1, also revealed that most of the players were between 21 and 25 years (n=186, 43.9%), even though quite a number of them were below 21 years (n=154, 36.3%). A few of the players are above 30 years of age (n=6, 1.4%). For the coaches, a larger proportion of them were 46 years or older (n=21, 47.7%). Some coaches also indicated that they were between the ages of 36-40 (n=11, 25%). Just as expected, the coaches (M=42.30, SD=10.44) were older than the football players (M=22.36, SD=3.53).

# Research Question One: What Organizational Stressors are Prevalent among Football Coaches and Players in the Premier League in Ghana?

This research question sought to explore the extent of stress and organizational stressors and their prevalence among the football players and coaches in the premier league in Ghana. The stressor indicators include 5-dimensional areas (i.e., goals and development, logistics and operations, team and culture, coaching and selection) which the players and coaches responded to using a scale of 0 to 5 (i.e., 0-No demand, 1- Very low demand, 2- Low demand, 3- Moderate demand, 4- High demand, 5- Very high demand). For the purposes of easy interpretation, the extreme categories of the scale had been merged. That is, no demand, very low demand, and low demand had been merged and named low demand. Similarly, high demand and very high demand had been collapsed as high demand. Based on this categorisation, a mean score below 2.45 denoted low demand, between 2.45 and 3.44 represented moderate demand and greater than 3.44 signified high demand. The details of the results are shown in Table 2.

**Table 2: Organizational Stressors among Football Coaches and Players** 

Indicators	Coaches		Players	Players		p-
	Mean	SD	Mean	SD	value	value
Goals and Development	3.45	.78	2.81	.99	4.99	.000
Logistics and Operations	3.23	.99	2.72	1.03	3.27	.002
Team and Culture	3.47	.85	2.73	1.14	5.28	.000
Coaching	3.10	1.41	2.64	1.48	1.99	.047
Selection	3.55	1.15	2.96	1.48	3.11	.012
Mean of Mean	3.36	.81	2.77	1.02	4.46	.000

Source: Field Survey (2020)

The results in Table 2 show that generally, stress was common among premier league coaches (M=3.36, SD=.81) and players (M=2.77, SD=1.02). The level of stress was moderate and coaches significantly experienced it more than the players. Focusing on specific areas of stress, both players and coaches experienced stress in very similar areas of their work. For example, the coaches experienced high-stress demands for selection (M=3.55, SD=1.15), team and culture (M=3.47, SD=.85) and goals and development (M=3.45, SD=.78). There are moderate demands for two stress indicators for coaches, namely, logistics and operations (M=3.23, SD=.99), and coaching (M=3.10, SD=1.41).

A similar trend of results was found for the players. Although the football players reported moderate stress levels on all the stressor indicators, selection (M=2.96, SD=1.48), goals and development (M=2.81, SD=.99) and team and culture (M=2.73, SD=1.14) were the most dominant stress demands for the players. This trend was followed by logistics and operations (M=2.72, SD=1.03) and coaching (M=2.64, SD=1.48).

# Research Question Two: What Stress Appraisal Measures are Adopted by Football Coaches and Players in the Premier League in Ghana?

This research question sought to evaluate the stress appraisal measures adopted by football coaches and players in the premier league in Ghana. Using a scale of 1-5, the responses were analysed to reflect how stress was appraised by the participants based on six key appraisal measures: threat, challenge, centrality, controllable-by-self, controllable-by-others and uncontrollable-by-anyone. A higher mean score on a dimension denotes high utilisation of that particular stress appraisal mechanism. Specifically, values less than 2.5 signifies a low level of utilisation, scores between 2.5-3.4 showed a moderate level of utilisation, and values greater than 3.5 depicted high level of utilisation of the stress appraisal strategy. Table 3 highlights the details of the results.

Table 3: Stress Appraisal Strategies Used by Football Coaches and Players

Stress Appraisal	Coaches	400	Players	
	Mean	SD	Mean	SD
Primary appraisal	2.97	.72	2.82	.62
Threat	2.78	.75	2.67	.73
Challenge	3.09	.87	3.02	.79
Centrality	3.05	1.05	2.77	.84
Secondary appraisal	3.02	.50	2.81	.59
Controllable-by-self	3.59	.74	3.12	.81
Controllable-by-others	3.06	.76	2.91	.85
Uncontrollable-by-	2.39	.84	2.39	.82
anyone				

Source: Field Survey (2020)

The results in Table 3 show that the stress appraisal mechanism predominantly employed by the football coaches (M=3.59, SD=.74) and players (M=3.12, SD=.81) was controllable-by-self. Both the coaches (M=3.09, SD=.87) and players (M=3.02, SD=.79) also used the challenge stress appraisal mechanism, aside the controllable-by-self stress appraisal strategy. The third most used appraisal mechanism adopted by both the coaches (M=3.06, SD=.76) and players (M=2.91, SD=.85) were controllable-by-others appraisal strategy. The least adopted stress appraisal mechanism by both coaches (M=2.39, SD=.84) and players (M=2.39, SD=.82) was uncontrollable-by-anyone strategy.

# Research Question Three: What Coping Strategies are Adopted by Football Coaches and Players in the Premier League in Ghana?

This research sought to examine the coping strategies adopted by football coaches and players in the premier league in Ghana. Responses were solicited from both coaches and players on the various coping strategies employed using a scale of 1-5. The coping strategies included active coping, planning, seeking social support for instrumental reasons, increasing effort, seeking social support for emotional reasons, venting emotions, and self-blame. The higher the mean score, the more the coping strategy was utilised. Specifically, values less than 2.5 signify a low level of utilization, scores between 2.5-3.4 show a moderate level of utilization and values greater than 3.5 depict high level of utilisation of the coping style. The details of the analysis are shown in Table 4.

**Table 4: Coping Strategies Adopted by Football Coaches and Players** 

Coping Strategies	Coache	Coaches		
	Mean	SD	Mean	SD
Problem-focused Coping	3.45	.78	3.28	.71
Active coping	3.50	.77	3.21	.90
Planning	3.40	1.05	3.26	.86
Seeking social support for	3.09	.92	3.11	.85
instrumental reasons		1-		
Increasing effort	3.79	.94	3.54	.96
Emotional-focused coping	2.89	.75	2.80	.69
Seeking social support for emotional	2.89	.929	2.76	.86
reasons	3			
Venting emotions	2.86	1.06	2.78	.91
Self-blame	2.93	.89	2.86	.84
G 5: 11 G (2020)				

Source: Field Survey (2020)

As shown in Table 4, both the coaches and players reportedly used problem-focused coping strategies. The most common coping strategy adopted by the coaches (M=3.79, SD=.94) and players (M=3.54, SD=.96) was the increasing effort strategy. The second most used coping strategy indicated by coaches (M=3.50, SD=.77) was active coping and players (M=3.26, SD=.86) was planning. Whereas planning was the third most used coping strategy among the coaches (M=3.40, SD=1.05), players reported using active coping (M=3.21, SD=.90). Notably, the three most reportedly used coping strategies were increasing efforts, active coping and planning by coaches and players.

Research Question Four: To What Extent Would Age and Years of Experience Contribute to Organizational Stressors among Football Coaches and Players in the Premier League in Ghana?

This research question sought to examine the contribution of age and years of experience to organisational stressors among football coaches and players in the premier league in Ghana. To address this research question, a factorial MANOVA was conducted. The two independent variables selected

were age and years of experience. The dependent variables were the organisational stressor indicators on the OSI-SP questionnaire, with five subscales made up of goals and development, logistics and operations, team and culture, coaching and selection. In order to meet the minimum requirement on the number of respondents in each cell, the following categorisations were done: (1) ages of coaches were categorized into less than 35 years, and 35 years and above, (2) ages of players were transformed into less than 25 years and 25 years and above, (3) years of experience for both coaches and players were classified into 5 years and less, and more than 5 years. Prior to the analysis, the following assumptions: univariate and multivariate normality, outlier detection, multicollinearity, and homogeneity of variance-covariance matrix were tested (See Figure 1 in appendix A).

Figure 1 presents the Q-Q plots for all the sub-dimensions of organizational stressor indicators. As shown in Figure 1, both univariate and multivariate normality were satisfied. That is, for each of the Q-Q plots, the data points were arguably closer to the line. There was evidence of normality since all the data points appeared to form a straight line, implying that the normality assumption has been satisfied.

### Multivariate outliers and linearity

The data were explored to test for linearity assumption and also identify outliers (see Figure 2 in Appendix B). The data, as displayed in Figure 2, showed that there appeared to be some few cases of multivariate normality present in the data. A typical case is shown in the scatter plot between logistics and operation, and team and culture variables. Logistics and operations and selection also showed the presence of a multivariate outlier. Further checks

were conducted to establish whether these few outliers might affect the results. Data on the 5% trimmed mean yielded an estimate of 2.9 which is approximately closer to the composite mean of 2.87. This pattern showed that these outliers were not sufficient enough to distort the results. The scatter plots shown in Figure 2 reveal a linear relationship between the variables. Thus, the data satisfies the linearity assumption.

# **Multicollinearity assumptions**

The multicollinearity assumption was tested to understand the relationship that exists between the dependent variables. For this assumption to be satisfied, the variables should be moderately related. Table 5 presents the details of the results.

**Table 5: Multicollinearity Assumption** 

OSI-SP dimensions	1	2	3	4	5
1. Goals	17				
2. Logistics and Operations	.752**	1		0	
3. Team and culture	.667**	.701**	1		
4. Coaching	.520**	.585**	.620**	TV.	
5. Selection	.600**	.605**	.624**	.517**	1
Mean	2.87	2.77	2.80	2.68	3.02
SD	.99	1.04	1.14	1.48	1.46

<sup>\*\*</sup>correlation significant at p<.001

Table 5 shows the correlation matrix among the sub-dimensions of the organisational stressor indicator variables. The results showed that the least and maximum correlation coefficients were .517 and .752 respectively. The relationships between the variables were not strong nor weak. These relationships among the variables were all moderate, thus satisfy the multicollinearity assumption.

# Homogeneity of variance-covariance assumption

The Box's M-test of equality of covariance matrices was conducted to test for the homogeneity of variance-covariance assumption. This particular assumption requires separate testing for both coaches and players. The results

**Table 6: Box's Test of Equality of Covariance Matrices** 

Coaches		Players	
Box's M	11.540	Box's M	58.949
F	.620	F	1.143
df1	15	df1	45
df2	1994.37	df2	2195.09
Sig.	.861	Sig.	.239

Source: Field Survey (2020)

are shown in Table 6.

For coaches, the homogeneity of variance-covariance assumption was satisfied, F(15, 1994.37)=11.540, p=.861. This assumption was also not violated for the players' data, F(45, 2195.09)=59.949, p=.239. Hence, Wilks' Lambda estimates are reported for the coaches and players data respectively.

MANOVA results for coaches on the contribution of age and years of experience on organizational stressors

The MANOVA results for coaches are presented in Tables 7 and 8.

Table 7: Multivariate Results for Coaches on the Contribution of Age and Years of Experience on Organizational Stressors

Effect	Value	F	df 1	df 2	Sig.
Intercepts	.066	102.256 <sup>c</sup>	5	36	.000
Experience	.825	1.530 <sup>c</sup>	5	36	.205
Age	.915	.666 <sup>c</sup>	5	36	.651
Experience*Age	.894	.850 <sup>c</sup>	5	36	.524

Dependent Variable: Organizational Stressor Indicators

Source: Field Survey (2020)

Table 7 presents the multivariate results of the MANOVA analysis for coaches. The results showed that experience [F(5, 36) = 1.530, p = .205], age  $[F(5, 36) = .666^{c}, p = .651]$ , and experience-by-age interaction [F(5, 36) = .894, p = .524] do not significantly influence the stressor indicators among coaches.

Table 8 further presents the univariate results of the MANOVA analysis. For the interpretation of the univariate result, a stringent alpha (i.e., Bonferroni correction) was set to control for Type 1 error. This approach was done by dividing the alpha level by the number of dependent variables. That is, .05 was divided by 5 to get a corrected alpha level of .01. Therefore, the p-values are compared with .01 instead of .05 alpha value.

Table 8: Tests of Between Subject Effects (Univariate Results) for Coaches on the Contribution of Age and Years of Experience on Organizational stressors

11/			M	100		
Source	Dependent	Type	df	Mean	F	Sig.
	Variable	III Sum		Square		
		of	3			
		Squares			60	
Intercept	Goals	279.691	1	279.691	497.945	.000
	Logistics and	244.926	/1	244.926	242.533	.000
	Operations				0	
	Team and	276.238	1	276.238	388.989	.000
10	culture	1			2	
10	Coaching	197.841	1	197.841	98.584	.000
	Selection	285.272	1	285.272	215.970	.000
Experience	Goals	2.019	1	2.019	3.594	.065
.0,	Logistics and	.017	1	.017	.017	.898
	Operations			2/		
	Team and	1.092	1	1.092	1.538	.222
	culture	BI5	_			
	Coaching	1.769	1	1.769	.881	.353
	Selection	.453	1	.453	.343	.562
Age	Goals	.952	1	.952	1.695	.200
	Logistics and	.510	1	.510	.505	.481
	Operations					
	Team and	1.377	1	1.377	1.939	.171
	culture					
	Coaching	3.630	1	3.630	1.809	.186
	Selection	2.082	1	2.082	1.576	.217

Table 8: Continued

Goals	_	129	1	.129	.230	.634
			1			.361
•		000	•	.002	.02 .	.501
operations						
Геат а	nd .	124	1	.124	.174	.679
culture						
Coaching	3	3.212	1	3.212	1.601	.213
Selection		258	1	.258	.196	.661
Goals	2	22.468	40	.562		
Logistics a	nd 4	10.395	40	1.010		
Operations						
Геат а	nd 2	28.406	40	.710		
culture				-		
Coaching	8	30.273	40	2.007		
Selection	5	52.835	40	1.321		
Goals	LUBAS	547.694	44			
Logistics a	nd 5	501.506	44			
Operations	na	100				
-	nd 5	61.563	44		4	
culture						
	5	509.250	44		19	
Selection			44	-	7	
	Logistics a Deperations  Feam a culture Coaching Selection Goals Logistics a Deperations Feam a culture Coaching Selection Goals Logistics a Deperations Feam a culture Coaching Coaching Coaching Coaching Coaching Coaching Coaching	Logistics and Departions  Feam and culture Coaching 3 Selection .  Goals 2 Logistics and 2 Departions Feam and 2 Evaluation and 2 Evaluation and 3 Evaluation and 5 Evaluation a	Logistics and .863 Operations  Feam and .124 culture Coaching 3.212 Selection .258 Goals 22.468 Logistics and 40.395 Operations Feam and 28.406 culture Coaching 80.273 Selection 52.835 Goals 547.694 Logistics and 501.506 Operations Feam and 561.563 culture Coaching 509.250	Cogistics and   Coperations   Coperations	Deperations  Team and .124 1 .124  Coaching 3.212 1 3.212  Selection .258 1 .258  Goals 22.468 40 .562  Logistics and 40.395 40 1.010  Deperations  Team and 28.406 40 .710  Coaching 80.273 40 2.007  Selection 52.835 40 1.321  Goals 547.694 44  Deperations  Team and 561.563 44  Coaching 509.250 44	Deperations  Team and .124 1 .124 .174  Coaching 3.212 1 3.212 1.601  Selection .258 1 .258 .196  Goals 22.468 40 .562  Logistics and 40.395 40 1.010  Deperations  Team and 28.406 40 .710  Coaching 80.273 40 2.007  Selection 52.835 40 1.321  Goals 547.694 44  Logistics and 501.506 44  Deperations  Team and 561.563 44  Coaching 509.250 44

Dependent Variable: Organizational Stressor Indicators sub-dimensions Source: Field Survey (2020)

The results, as shown in Table 8, revealed that experience, age and experience-by-age do not significantly influence the specific dimensions of organisational stressor indicators for coaches. There is no evidence that age and experience influence the stressors of football coaches.

MANOVA results for players on the contribution of age and years of experience on organizational stressors

The details of the results are shown in Table 9.

Table 9: Multivariate Results for Players on the Contribution of Age and Years of Experience on Organizational Stressors

Effect	Value	F	df 1	df 2	Sig.
Intercept	.306	187.461c	5	414	.000
Experience	.994	.502c	5	414	.775
Age	.994	.522c	5	414	.760
Experience * Age	.988	1.046c	5	414	.390

Dependent Variable: Organizational Stressor Indicators

Source: Field Survey (2020)

Table 9 presents the multivariate results of the MANOVA analysis for players. The results showed that experience [F(5, 414)=.502, p=.775], age  $[F(5, 414)=.522, p=.760]\setminus$  and experience-by-age interaction [F(5, 414)=1.046, p=.390] did not significantly influence the composite organisational stressor indicators among players.

Table 10 further presents the univariate results of the MANOVA analysis for the players. For the interpretation of the univariate results, a similar stringent alpha (i.e., Bonferroni correction) was also set to control for Type 1 error. The same previous procedure was followed to generate a new alpha value of .01.

Table 10: Test of Between-Subject Effects for Players on the Contribution of Age and Years of Experience on Organizational Stressors

01118	and rears or	Zaperience.	011 01	Summentiona	Der ebborb	
Source	Dependent	Type III	df	Mean	F	Sig.
	Variable	Sum of		Square	/	
		Squares				
Intercept	Goals	842.181	1	842.181	865.381	.000
	Logistics	796.017	1	796.017	757.879	.000
	and				XI.	
	Operations		Alle			
	Team and	763.239	1	763.239	597.653	.000
	culture					
	Coaching	772.479	1	772.479	356.322	.000
2.	Selection	895.442	1	895.442	408.665	.000
Experience	Goals	2.300	1	2.300	2.363	.125
	Logistics	1.487	1	1.487	1.416	.235
13	and					
	<b>Operations</b>	10		2/		
	Team and	1.946	1	1.946	1.524	.218
	culture	DBIS				
	Coaching	2.373	1	2.373	1.094	.296
	Selection	1.833	1	1.833	.836	.361
Age	Goals	.427	1	.427	.439	.508
	Logistics	.821	1	.821	.781	.377
	and					
	Operations					
	Team and	2.747	1	2.747	2.151	.143
	culture					
	Coaching	3.365	1	3.365	1.552	.214
	Selection	.992	1	.992	.453	.501

Table 10: Co	ontinued					
Experience	Goals	.055	1	.055	.056	.812
*Age	Logistics	.001	1	.001	.001	.982
	and					
	Operations					
	Team and culture	2.995	1	2.995	2.346	.126
	Coaching	.103	1	.103	.048	.827
	Selection	1.564	1	1.564	.714	.399
Error	Goals	406.794	418	.973		
	Logistics	439.034	418	1.050		
	and			17		
The state of the s	Operations		7	7		
	Team and	533.812	418	1.277		
	culture	- 2	7			
	Coaching	906.191	418	2.168		
	Selection	915.895	418	2.191		
Total	Goals	3750.556	422			
	Logistics	3575.395	422			
	and					
	Operations					
land of the second	Team and	3702.813	422	7000		
	culture					
	Coaching	3861.750	422			
	Selection	4641.000	422		1/	

Dependent Variable: Organizational Stressor Indicators sub-dimensions

Source: Field Survey (2020)

The results, as shown in Table 10, revealed that experience, age and experience-by-age did not significantly influence the specific dimensions of organisational stressor indicators for players. There was no evidence that age and experience influenced the stressors of football players.

Research Question Five: What is the Association between Stress Appraisals and Coping Styles among Football Coaches and Players in the Premier League in Ghana?

This research question sought to examine the association between stress appraisals and coping styles among football coaches and players in the premier league in Ghana. To address this research question, multivariate multiple regression was conducted. The stress appraisal components are threat, challenge, centrality, controllable-by-self, controllable-by-others, and

uncontrollable-by-anyone. The coping styles dimensions are active coping, planning, seeking social support for instrumental reasons, increasing effort, seeking social support for emotional reasons, venting of emotions, and self-blame.

Before the analysis, the data were tested for multivariate normality and outliers (see Figure 3 in Appendix C). The results from the residual plots for each dependent variable revealed that the residuals were normally distributed. There was also no evidence of outliers in the data set. None of the data points was found to be extreme. Thus, these two assumptions have been met.

Table 11 presents the results on the parameter estimate for the multivariate regression analysis for coaches. Stringent alpha level was set for the multivariate multiple regression analysis to control for Type 1 error. This alpha value is calculated by dividing the significance level (i.e., .05) by the number of independent variables (i.e., 7). A new significance level of .007 (i.e., .05/7) was set and used for the comparison.

Regression results for coaches on the association between stress appraisals and coping styles

Table 11 shows the regression results on the association between stress appraisal and coping styles of coaches.

Table 11: Association between Stress Appraisals and Coping Styles of Coaches

	The Real Property lies and the last lives	A STATE OF THE PARTY OF THE PAR			
Dependent	Parameter	В	Std.	t	Sig.
Variable			Error		
Active	Intercept	.383	.678	.565	.576
coping	Threat	.466	.220	2.118	.041
	Challenge	104	.123	845	.403
	Centrality	.058	.141	.415	.681
	Controllable-by-Self	.466	.155	3.008	.005*

Table 11: Continued

Table 11: Cont	inued				
	Controllable-by-	.095	.130	.726	.472
	Others				
	Uncontrollable-by-	001	.142	009	.993
	anyone				
Planning	Intercept	967	.949	-1.019	.315
	Threat	.592	.308	1.922	.062
	Challenge	079	.172	462	.647
	Centrality	037	.197	186	.853
	Controllable-by-Self	.800	.217	3.687	.001*
8	Controllable-by-	.166	.182	.912	.368
	Others	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
	Uncontrollable-by-	126	.199	632	.531
	anyone	20	.177	.032	.001
Seeking	Intercept	.196	.866	.227	.822
social	Threat	.155	.281	.551	.585
support for	Challenge	032	.157	202	.841
instrumental	Centrality	.267	.180	1.484	.146
		.368	.198	1.464	.071
reasons	Controllable-by-Self				
	Controllable-by-	.014	.167	.082	.935
	Others	100	100	004	202
	Uncontrollable-by-	.161	.182	.884	.383
-	anyone	020	0.40	004	001
Increasing	Intercept	020	.840	024	.981
effort	Threat	.454	.273	1.665	.104
	Challenge	128	.152	839	.407
	Centrality	.137	.175	.782	.439
1	Controllable-by-Self	.481	.192	2.506	.017
	Uncontrollable-by-	.241	.162	1.493	.144
				The second second	
CO	anyone			5	
	anyone Uncontrollable-by-	.024	.176	.137	.892
C. C.		.024	.176	.137	.892
PHAS	Uncontrollable-by-	.024	.176	.137	.892
seeking	Uncontrollable-by-	.024	.176	1.573	.892
seeking social	Uncontrollable-by- anyone	1	(In)		
•	Uncontrollable-by- anyone  Intercept	1.512	.961	1.573	.124
social	Uncontrollable-by- anyone  Intercept Threat	1.512 408	.961 .312	1.573 -1.307	.124 .199
social support for	Uncontrollable-by- anyone  Intercept Threat Challenge	1.512 408 029	.961 .312 .174	1.573 -1.307 167	.124 .199 .868
social support for emotional	Uncontrollable-by- anyone  Intercept Threat Challenge Centrality	1.512 408 029 .407	.961 .312 .174 .200	1.573 -1.307 167 2.038	.124 .199 .868 .049
social support for emotional	Uncontrollable-by- anyone  Intercept Threat Challenge Centrality Controllable-by-Self Uncontrollable-by-	1.512 408 029 .407 .266	.961 .312 .174 .200 .220	1.573 -1.307 167 2.038 1.209	.124 .199 .868 .049 .234
social support for emotional	Uncontrollable-by- anyone  Intercept Threat Challenge Centrality Controllable-by-Self	1.512 408 029 .407 .266	.961 .312 .174 .200 .220	1.573 -1.307 167 2.038 1.209	.124 .199 .868 .049 .234

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Table 11: Continued

Venting	Intercept	.793	1.109	.715	.479
emotions	Threat	178	.360	494	.624
	Challenge	.066	.201	.329	.744
	Centrality	.268	.231	1.163	.252
	Controllable-by-Self	.518	.253	2.045	.048
	Controllable by	181	.213	848	.402
	Others				
	Uncontrollable-by-	.097	.233	.417	.679
	anyone		1		
Self-blame	Intercept	1.754	.933	1.879	.068
	Threat	507	.303	-1.674	.103
	Challenge	.162	.169	.958	.344
	Centrality	.396	.194	2.041	.048
	Controllable-by-Self	.061	.213	.287	.776
	Controllable-by-	093	.180	520	.606
	Others				
	Uncontrollable-by-	.395	.196	2.014	.051
	anyone				

Source: Field Survey (2020)

The results, as shown in Table 11, only controllable-by-self was found to be associated with the coaches active coping, b=.466, t=3.008, p=.005 and planning coping strategies; b=.800, t=3.687, p=.001. The rest of the variables under the stress appraisal mechanism (i.e., threat, challenge, centrality, controllable by others, uncontrollable by anyone) did not influence any of the coping styles of the football coaches.

# Regression results for players on the association between stress appraisals and coping styles

Table 12 presents results on stress appraisal and coping styles of football players.

<sup>\*</sup>Significant at p<.007

Table 12: Association between Stress Appraisals and Coping Styles of Football Players

Dependent	Parameter	В	Std.	t	Sig.
Variable	1 didilictor	D	Error	·	515.
Variable			Liioi		
Active	Intercept	1.162	.218	5.321	.000
coping	Threat	.101	.071	1.428	.154
3	Challenge	.208	.060	3.462	.001*
	Centrality	011	.059	185	.854
	Controllable-by-Self	.291	.058	<b>5</b> .007	*000
	Controllable-by-	.156	.052	2.989	.003*
	Others	2			
	Uncontrollable-by-	080	.056	-1.442	.150
	Anyone				
Planning	Intercept	1.157	.205	<b>5</b> .643	.000
	Threat	.017	.066	.259	.796
	Challenge	.169	.057	2.993	.003*
	Centrality	.042	.055	.752	.453
	Controllable-by-Self	.287	.055	5.257	*000
	Controllable-by-	.175	.049	3.573	*000
	Others				
	Uncontrollable-by-	.008	.052	.161	.872
	A				
	Anyone				
Seeking	Intercept	1.119	.211	5.315	.000
Seeking social		1.119 .134	.211	5.315 1.970	.000
	Intercept				
social	Intercept Threat	.134	.068	1.970	.051
social support for	Intercept Threat Challenge	.134 .061	.068 .058	1.970 1.051	.051 .294
social support for instrumental	Intercept Threat Challenge Centrality	.134 .061 .046	.068 .058 .057	1.970 1.051 .812	.051 .294 .417
social support for instrumental	Intercept Threat Challenge Centrality Controllable-by-Self	.134 .061 .046 .152	.068 .058 .057 .056	1.970 1.051 .812 2.722	.051 .294 .417 .007*
social support for instrumental	Intercept Threat Challenge Centrality Controllable-by-Self Controllable-by-	.134 .061 .046 .152	.068 .058 .057 .056	1.970 1.051 .812 2.722	.051 .294 .417 .007*
social support for instrumental	Intercept Threat Challenge Centrality Controllable-by-Self Controllable-by- Others	.134 .061 .046 .152 .142	.068 .058 .057 .056 .050	1.970 1.051 .812 2.722 2.824	.051 .294 .417 .007* .005*
social support for instrumental	Intercept Threat Challenge Centrality Controllable-by-Self Controllable-by- Others Uncontrollable-by-	.134 .061 .046 .152 .142	.068 .058 .057 .056 .050	1.970 1.051 .812 2.722 2.824	.051 .294 .417 .007* .005*
social support for instrumental reasons	Intercept Threat Challenge Centrality Controllable-by-Self Controllable-by- Others Uncontrollable-by- Anyone	.134 .061 .046 .152 .142	.068 .058 .057 .056 .050	1.970 1.051 .812 2.722 2.824 3.289	.051 .294 .417 .007* .005*
social support for instrumental reasons  Increasing	Intercept Threat Challenge Centrality Controllable-by-Self Controllable-by- Others Uncontrollable-by- Anyone Intercept	.134 .061 .046 .152 .142 .176	.068 .058 .057 .056 .050	1.970 1.051 .812 2.722 2.824 3.289	.051 .294 .417 .007* .005* .001*
social support for instrumental reasons  Increasing	Intercept Threat Challenge Centrality Controllable-by-Self Controllable-by- Others Uncontrollable-by- Anyone Intercept Threat	.134 .061 .046 .152 .142 .176	.068 .058 .057 .056 .050 .054	1.970 1.051 .812 2.722 2.824 3.289 7.046 426	.051 .294 .417 .007* .005* .001*
social support for instrumental reasons  Increasing	Intercept Threat Challenge Centrality Controllable-by-Self Controllable-by- Others Uncontrollable-by- Anyone Intercept Threat Challenge	.134 .061 .046 .152 .142 .176	.068 .058 .057 .056 .050 .054	1.970 1.051 .812 2.722 2.824 3.289 7.046 426 4.125	.051 .294 .417 .007* .005* .001*
social support for instrumental reasons  Increasing	Intercept Threat Challenge Centrality Controllable-by-Self Controllable-by- Others Uncontrollable-by- Anyone Intercept Threat Challenge Centrality	.134 .061 .046 .152 .142 .176 1.640 032 .265 013	.068 .058 .057 .056 .050 .054 .233 .075 .064 .063	1.970 1.051 .812 2.722 2.824 3.289 7.046 426 4.125 207	.051 .294 .417 .007* .005* .001* .000 .670 .000* .836
social support for instrumental reasons  Increasing	Intercept Threat Challenge Centrality Controllable-by-Self Controllable-by- Others Uncontrollable-by- Anyone Intercept Threat Challenge Centrality Controllable-by-Self	.134 .061 .046 .152 .142 .176 1.640 032 .265 013 .372	.068 .058 .057 .056 .050 .054 .054 .064 .063 .062	1.970 1.051 .812 2.722 2.824 3.289 7.046 426 4.125 207 6.014	.051 .294 .417 .007* .005* .001* .000 .670 .000* .836 .000*
social support for instrumental reasons  Increasing	Intercept Threat Challenge Centrality Controllable-by-Self Controllable-by- Others Uncontrollable-by- Anyone Intercept Threat Challenge Centrality Controllable-by-Self Controllable-by-Self Controllable-by-	.134 .061 .046 .152 .142 .176 1.640 032 .265 013 .372	.068 .058 .057 .056 .050 .054 .054 .064 .063 .062	1.970 1.051 .812 2.722 2.824 3.289 7.046 426 4.125 207 6.014	.051 .294 .417 .007* .005* .001* .000 .670 .000* .836 .000*
social support for instrumental reasons  Increasing	Intercept Threat Challenge Centrality Controllable-by-Self Controllable-by- Others Uncontrollable-by- Anyone Intercept Threat Challenge Centrality Controllable-by-Self Controllable-by-Self Controllable-by-Others	.134 .061 .046 .152 .142 .176 1.640 032 .265 013 .372 .072	.068 .058 .057 .056 .050 .054 .054 .233 .075 .064 .063 .062 .056	1.970 1.051 .812 2.722 2.824 3.289 7.046 426 4.125 207 6.014 1.290	.051 .294 .417 .007* .005* .001* .000 .670 .000* .836 .000* .198

Table 12: Continued

14010 12. 00	iidiidea				
seeking	Intercept	.871	.211	4.129	.000
social	Threat	.338	.068	4.944	*000
support for	Challenge	.037	.058	.634	.526
emotional	Centrality	037	.057	644	.520
reasons	Controllable-by-Self	.027	.056	.485	.628
	Controllable-by-	.090	.050	1.785	.075
	Others				
	Uncontrollable-by-	.264	.054	4.915	*000
	Anyone		1		
venting	Intercept	.747	.224	3.332	.001
emotions	Threat	.216	.073	2.983	.003*
	Challenge	.006	.062	.101	.920
	Centrality	.038	.060	.622	.534
	Controllable-by-Self	.082	.060	1.374	.170
	Controllable-by-	.164	.054	3.065	.002*
	Others				
	Uncontrollable-by-	.246	.057	4.312	*000
	Anyone				
Self-blame	Intercept	.877	.205	4.271	.000
	Threat	.272	.066	4.096	*000
	Challenge	.101	.057	1.778	.076
	Centrality	027	.055	482	.630
	Controllable-by-Self	.060	.055	1.103	.271
	Controllable-by-	.113	.049	2.313	.021
	Others				
	Uncontrollable-by-	.213	.052	4.072	*000
	Anyone			XX	
				and the same of th	

Source: Field Survey (2020)

As shown in Table 12, associations were drawn between the specific dimensions of stress appraisal strategies and the coping styles of players. Among the results, challenge [b=.208, t=3.462, p=.001], controllable-by-self [b=.291, t=5.007, p<.001], and controllable-by-others [b=.156, t=2.989, p=.003] significantly influenced the active coping style of players. Again, challenge [b=.169, t=2.993, p=.003], controllable-by-self [b=.287, t=5.257, p<.001], and controllable-by-others [b=.175, t=3.573, p<.001] were also found to be significantly associated to the planning coping style of players.

<sup>\*</sup>Significant at p≤.007

The results also revealed that controllable-by-self [b=.152, t=2.722, p=.007], controllable-by-others [b=.142, t=2.824, p=.005], and uncontrollable-by-anyone [b=.176, t=3.289, p=.001] significantly influenced players' coping behaviours on seeking social support for instrumental reasons. Further, challenge [b=.265, t=4.125, p<.001] and controllable-by-self [b=.372, t=6.014, p<.001] significantly influenced players coping behaviours on increasing effort.

Threat [b=.338, t=4.944, p<.001] and uncontrollable-by-anyone [b=.264, t=4.915, p<.001] were significantly related to players' coping behaviours on seeking support for emotional reasons. The results also revealed that threat [b=.216, t=2.983, p<.001], controllable-by-others [b=.164, t=3.065, p=.002] and uncontrollable-by-anyone [b=.246, t=4.312, p<.001] significantly influenced players' coping behaviours on venting emotions. Other results showed that threat [b=.272, t=4.096, p<.001], and uncontrollable-by-anyone [b=.213, t=4.072, p<.001] significantly influenced players' coping behaviours on self-blame.

### Discussion

The purpose of this study was to examine stress appraisals and coping styles among premier league coaches and players in Ghana. This section of the study highlights how the major findings relate to previous studies and associated practical implications based on the research questions.

# Organizational stressors prevalence among football coaches and players in the premier league in Ghana

Research Question One explored the extent and prevalence of organisational stressors among football players and coaches in the premier

league in Ghana. Corroborating existing literature (e.g., Arnold & Fletcher, 2012; Arnold et al., 2016; Didymus & Fletcher, 2014; Fletcher & Scott, 2010; Fletcher & Didymus, 2017) on the stressful nature of the sporting environment within which coaches and athletes operate, this present study revealed that coaches and players in the Ghanaian premier league generally experienced many stressors. The intensity of these stressors was moderate and coaches significantly experienced them more than the players. Specifically, both coaches and players experienced high to moderate stress demands on selection, team and culture, and goals and development respectively. Stress regarding logistics and operations, and coaching were the least stressors experienced by both coaches and players in the Ghana premier league.

This outcome is reflected in previous observations of Kristiansen (2012) who indicated that football coaches are the ones who usually set standards and control all activities in the team. Fletcher and Scott (2010) also suggested that there is a high demand on coaches concerning what they do on key matters such as squad and team selection, athletes' well-being and performance, organization and administrative tasks whilst they try to improve their own performances (Gould et al., 2002). Similar evidence was revealed in Thelwell et al. (2017)'s study on the perceptions of athletes on stress experienced by their coaches in elite sports environments. The authors indicated that coaches who operate at the highest competitive level did perform their duties in a pressurized, complex and dynamic environment, placing a heavy demand on them to perform even in the midst of all challenges. Taken together, the overall supervisory role often given to the coaches to ensure that the team performs to the best of its ability at all

competitions or matches has varied elements, including selection (e.g., who get selected), team and culture (e.g., work climate) as well as goals and developmental (e.g., design of appropriate training schedule) related issues. Players, however, are expected to implement or execute the plans outlined by their coaches in pursuit of successes in matches or competitions. Hence, coaches are more likely to be burdened more compared to their players. Alternatively, whereas players are not sacked for poor performance, coaches are usually relieved of their official duties or sacked for the overall performance of their teams even though there could be multifaceted factors (e.g., caliber of players, logistics) that may not have directly been caused by coaches. Within football administration, club owners or Board of Directors (BODs) usually set performance standards that have to be met by coaches on their assumption to post and such standards put enormous demand on the coaches. Fletcher and Scott (2010) argued that coach's continuous employment was highly dependent on their immediate willingness to perform successfully. Therefore, performance expectations often heighten the burden on the coaches and put enormous demand on them to deliver or achieve targets set by the clubs (Didymus, 2017). There have been several instances where highly respected football coaches with rich coaching experiences lose their jobs because of failure to meet specific performance targets set by club owners (Akenteng, 2019; Didymus, 2017; Gould et al., 2002).

Taking the selection indicator, for instance, coaches reported being burdened on how selection should be done for matches whereas players reported being stressed on how to get selected into the team for matches. For coaches, lack of clear selection criteria and procedures, selecting players for

their respective positions and rotating them for matches to meet the demands of the league competition to attain a favorable outcome throughout the season could be stressful or burdensome (Didymus, 2017). Similarly, for players, the demands of playing and meeting technical and/or tactical demands, coupled with occasional squad rotation and positions are characterized with intense pressure culminating in high stress experiences (Didymus, 2017; Fletcher et al., 2006). Additionally, it is possible that having equally competent teammates playing similar positions and having a poor interpersonal relationship with the coaching staff could equally place high demands on players regarding selection. This argument is consistent with that of Mellalieu, Neil, Hanton and Fletcher (2009) who in their study found position security and rivalry among elite sport performers who were preparing for competition. For the athletes, although selection was a grave concern and caused stress, these demands were dependent on the need to excel to attain or maintain position and/or selection (Didymus, 2017; Mellalieu et al., 2009). For teams to successfully win their matches, there is the need for coaches to make appropriate team selection that can equally match up to the standards of their opponents at any particular point in time. Further, due to performance related expectations, coaches and analogous staff are under continuous scrutiny by club owners and other stakeholders (e.g., team supporters, media) on technical, tactical and management related decisions. Hence, the fear of losing the coaching job or having contract terminated triggers and/or increases coaches' stress experiences (Didymus & Fletcher, 2017; Kristiansen et al., 2012; Mellalieu et al., 2009; Noblet & Gifford, 2002).

There appears to be a competing interest for both players and coaches about the selection dimension. Whereas players would want coaches to select them for a match, coaches would also want players they have selected to put up excellent performances in order to justify or guarantee their continuous selection in the team. This situation places greater demand on both coaches (in terms of making a good selection) and players (in terms of being selected). This selection dilemma further creates a scenario where coaches see squad selection and rotation as potential stressors to them (Giacobbi et al., 2004; Gould et al., 1993; Hanton et al., 2005; Mellalieu et al., 2006; Noblet & Gifford, 2002) and players also seeing their coaches as potential stressors (Fletcher & Scott, 2010; Kristiansen et al., 2012; Olusoga et al., 2009; Thelwell., 2012; Thelwell et al., 2017). This trend brings to the understanding of how coaches feel when players they have selected do not consistently perform well, and likewise, how players feel when they are not usually selected for matches. Although team selection causes stress for both coaches and players, coaches experience more demands than players on the issue of team selection perhaps due to the fact that coaches immediately after selection do not have control over the player's performance as asserted by Thelwell et al. (2008). Other more recent, articles (e.g., Alsentali & Anshel, 2015; Parent et al., 2014) agree that a myriad of stressors that athletes experience have a linkage with their coaches. Thelwell et al. (2017)'s investigation on the perceptions of athletes regarding their coaches' stress encounters, revealed that the coaching environment as well as the athletes themselves were adversely affected when their coaches experienced stress. Moreover, other researchers (Olusoga et al. 2010) also examined the connection between coaches and athletes' experiences of stress from the coach's point of view instead of the athletes' and observed that coaches believed that their athletes could be the victims of their negative stressful experiences.

Moreover, the study also found that both players and coaches experienced stress in the pursuit of their goals in their career and also to develop from one level to another. This finding supports previous studies suggesting that society positively acknowledges individuals who work hard or put in maximum effort to achieve their goals whilst giving up on a set goal is viewed as a weakness (Ntoumanis et al., 2014a). Similarly, Heckhausen et al., (2010) and others suggested that goals structure people's lives and promote positive behaviours that eventually improves their well-being. Staufenbiel et al., (2015) reiterated that setting goals is an effective tool for performance enhancement. There is also a documentation that athletes may set goals, such as achieving personal best in teams, winning a particular event, beating a particular opponent whereas coaches' goals may be continuously winning matches to receive accolades. However, these goals may at some point not be achievable nor attainable, and can generate sustained pressure leading to stress (Lazarus, 1999; Ntoumanis et al., 2014a). Most often, coaches and players set goals or targets that they need to achieve at every stage of their career (Senécal, Loughead, & Bloom, 2008) thus, they face several degrees of stress in their quest to achieve such tasks and process goals as well as short-term and long-term goals. Similarly, coaches and players are expected to make progress or achieve their process goals from time to time as they train or learn the craft of coaching. Extant literature (e.g., Smith, Cohen, & Pickett, 2014; Weinberg, 2010) has confirmed the positive outcomes of setting goals against task in the

sports context for both coaches and performers. For instance, short-term and long-term goals are usually set by coaches with the aim of achieving success for their teams (Burgess & Naughton, 2010; Paradis & Martin, 2012). However, coaches' inability to explicitly set specific, measurable, attainable, realistic and time-bound goals may put a significant burden on them (Nicholls et al., 2016; Weintraub, Cassell, & DePatie, 2021). Additionally, players who seem not to have developed after several training sessions or achieved their personal goals for their upcoming competitions due to time limitations, injury or biological capabilities may be dropped in matches or competitions until they prove otherwise. This situation causes a huge demand on them to keep working hard (Ntoumanis et al., 2014a). Indeed, realising one's inability to achieve her or his goals can be a potential stressor because stress occurs when a person's goals become unattainable (Ntoumanis et al., 2014a; Lazarus, 1999).

Similarly, the team atmosphere and culture presented some level of stress for the coaches and players. For example, it is possible that the coaches and players are burdened with certain undesirable attitudes (such as rivalry among players who play the same position, exhibition of lackadaisical attitude towards attendance of training sessions and lateness) that are displayed by some teammates and other officials (Mellalieu et al., 2009). For example, players who played the same position in a game saw each other as rivals when they were preparing for a competition (Mellalieu et al., 2009). Stressing further on position security and rivalry among US professional soccer players, Kristiansen and Roberts (2012, p. 13) in their study, found a participant indicating that "if two guys are competing for the same spot, they are not

going to be best friends". This could lead to teammates frustrating, intimidating or making their perceived rival counterparts unpopular and look incompetent in order to win the coach's heart. Didymus (2017) further found in his study involving international and Olympic level coaches' stressors, appraisals and coping attitudes such as disrespectful behaviours, attending training with hangovers, abusing drugs and denying mistakes as well as reporting to training grounds late or not reporting at all for training led to tensions and lack of cohesion within the team. Possibly, such attitudes can trigger unpleasant reactions from coaches and among players if care is not taken. Differences in the beliefs of coaches and players demand extra efforts by both coaches and players to reach a consensus regarding some practices or routines that they need to perform, which may also create a hostile team atmosphere. Scholars (e.g., Hanton et al., 2005; Kristiansen, Murphy, & Roberts, 2012; Mellalieu et al., 2009; Olusoga et al., 2009) reiterate that team culture and atmosphere potentially affect the way players and coaches feel, think and behave. Hence, negative team atmosphere will negatively affect the feelings and thought patterns of players and coaches as well as the way they behave towards one another. This tendency is likely to cause stress for both players and coaches (Fletcher & Scott., 2010).

The finding that the Ghana premier league coaches and players experienced stress in their work is similar to the findings of other studies conducted in the United States of America (USA), United Kingdom (UK), Australia and Europe (Didymus, 2017; Fletcher & Scott, 2010; Hanton et al., 2005; Kristiansen et al., 2012; Mellallieu et al., 2009; Thelwell, 2012; Thelwell et al., 2017; Thelwell et al., 2008). For example, Didymus (2017)

found that coaches experienced many stressors in relation to selection, athlete concerns, coaching responsibilities, expectations, interference, preparation, organizational management, and performance among others. Further, Kristiansen et al. (2012) examined U.S. professional soccer players' organizational stress and related coping and found that players experienced numerous stressors relating to league and team structure, coach-athlete interaction, travel demands among others. The similarities in the findings could be as a result of standardisation of the competing environment with increasing demands across professional leagues eliciting enormous burden on coaches and players. That is to say that, the practices, philosophies, principles, and rules governing football globally are consistent and as such similar soccer environments exist irrespective of the country. Thus, the demands exerted by supporters and management on their teams to perform well in the league, coaching practices, and coaching systems among others increase the stress level of both coaches and players (Flores et al., 2012; Kroshus et al., 2015).

# Stress appraisal measures adopted by football coaches and players in the premier league in Ghana

Research Question Two evaluated the stress appraisal measures adopted by football coaches and players in the premier league in Ghana. The study revealed that controllable-by-self is the stress appraisal mechanism frequently employed by both the football coaches and players. This revelation suggests that coaches and players in this study felt that they had the ability to manage the organisational stressors they experienced while playing the 2020/2021 league, indicating the relevance and importance of the premier league to the attainment of their goals and well-being. This finding is similar

to previous finding which revealed that if an individual feels that individual has effective mechanisms in place for coping, it is very likely that individual will perceive that individual is in control. However, if the coaches and the players feel that they do not possess effective coping mechanisms, then they will appraise that they are not in control of the stressor (Nicholls et al., 2009; Lazarus & Folkman, 1999). Again, Bandura (2001) asserted that persons' belief that they have some amount of control over environmental situations and their own functioning is the most prevalent among all personal factors. This sense of control, according to Frazier et al., (2011), promotes the wellbeing of the individual. This present observation may have been influenced by individual differences such as resilience, hardiness, mental toughness, emotional intelligence (Hanton et al., 2012) as well as self-confidence (Anshel et al., 2012; Scorniaenchi & Feltz, 2010) and perceived competence (Blascovich, 2008) of the players and coaches. For instance, emotional intelligence has been found to have a buffering effect on stress (Lea, Davis, Mahoney & Qualter, 2019; Castro-Sánchez, Zurita-Ortega, Chacón-Cuberos, López-Gutiérrez, & Zafra-Santos, 2018). Indeed, more recently, mental toughness has also been found to provide significant buffering effect on perceived stress of athletes (Crawford, Tripp, Gierc & Scott, 2021). Supporting this idea, Bartone, Johnsen, Eid, Hystad, and Laberg (2017) provided evidence that hardiness suppresses the negative effect of stress experiences. Aside the individual factors that might have fortified the coaches and players in this study to have high self-control against stressors, situational factors such as social support network and organisational culture might have also influenced their stress appraisal. For instance, Hanton et al. (2005) emphasised that situational factors (i.e., social support network and organisational culture) are likely to influence the path a stress pattern takes. This assertion supports Dixon and Turner's (2018) study which found some of the participants expressing their displeasures about how some club owners and managers interfered and insisted on them to conform strictly to these club owners' norms and practices. This situation made them feel less in control and threatened and consequently put excessive pressure on them (Dixon and Turner, 2018). Therefore, it is likely that coaches and players in the present study have some level of autonomy and freedom to operate without excessive interferences from their club owners; hence, feeling more challenged than threatened and in control.

Both the coaches and players also emphasised that they used the challenge stress appraisal mechanism quite often aside the controllable-by-self stress appraisal strategy. Consistent with previous studies (Didymus, 2014; Nicholls et al., 2009; Nicholls et al., 2011; Nicholls, Perry & Calmeiro, 2014), challenge appraisals have been linked with perceptions of control which also led to the adoption of more positive coping behaviours like problem-focused coping by sport performers while threat appraisals moved in line with lack of control and generally less adaptive coping mechanisms, such as emotion-focused coping. For example, Dixon et al. (2016) investigated the connection between threat and challenge cognitive appraisals as well as football coaches coaching behaviours. Findings showed that coaches gained lots of advantages if they evaluated stressors as challenges. Dixon et al. (2016) reiterated that when people perceived that the resources available to them were inadequate in a particular situation, they responded with a maladaptive stress (i.e., threat).

Alternately, if adequate resources were perceived to be available, responses then became adaptive (i.e., challenge), facilitating a drive towards an achievement of one's goal. Additionally, challenge appraisals were linked with adaptive coaching behaviours while threat appraisals were linked with unpleasant coaching behaviours (Dixon et al., 2016). Thus, threat appraisals were linked to subjective stress, high anxiety levels, use of emotion-focused coping which attempted to ameliorate the negative feelings and thoughts that were associated with a stressful encounter and less usage of problem-focused coping that aimed to deal with the difficulty that was producing distress than in challenge appraisals (Skinner & Brewer, 2002). Dixon et al. (2016) revealed that coaches who viewed stressors as challenge had greater abilities in providing positive feedback and support to athletes because of the feeling that they could cope with the demands of the situations themselves. Additionally, coaches who appraised stressors as challenging experienced positive emotions that promoted good coaching behaviours such as social support and positive feedback for stronger and better relationships with the athletes they coached (Dixon et al., 2016).

Hence, it is not surprising that coaches and players who initially felt being in control of their stressors viewed these situations as challenging and not threatening. A possible explanation for this is that the coaches and players viewed themselves as having some number of capabilities to manage their stressful encounters probably because they were resilient in managing the stressful situations that confronted them (Seery, 2011). There is also a possibility that social networks and organisational culture may have influenced this finding (Norris, Didymus & Kaiseler, 2017). This observation

is similar to a previous study conducted by Didymus (2017). Didymus found that most of the coaches in his study employed the challenge stress appraisal mechanism. For instance, one of the coaches said that she felt quite excited when encountering a stressor in performance settings. However, the finding of this study was contrary to that of Hanton et al. (2012) and Neil et al. (2011) who found that performers generally appraised organisational stressors negatively (i.e., as threatening and or harmful) and few reports of challenge. Other researchers (Troup & Dewe, 2002; Holt & Dunn, 2004) also found appraisal of stressors to be related with threats among athletes. For instance, Holt and Dunn (2004) illustrated how organisational stressors were evaluated as being personally harmful to self-esteem after receiving coach criticism and threatening to participants' goals via perceived limited career development opportunities during organisational change (Holt & Dunn, 2004).

Moreover, both coaches and players indicated that the controllable-byothers was the third most used appraisal mechanism. This implies that coaches
and players evaluated that the stress they experienced could be controlled by
other people. This finding is likely since there are available avenues (such as
social support networks) that players and coaches can rely upon to manage or
cope with the stressors that confronted them (Raedeke & Smith, 2004;
DeFreese & Smith, 2013; Mitchell, Evans, Rees, & Hardy, 2014). For
example, Mitchell et al. (2014) examined the main stress-buffering effect
relationships between social support and psychological responses to injury
among athletes and found significant stress-buffering effects of social support
in relation to injury stressors and psychological responses. The
aforementioned literature provided evidence that subsequent to experiencing

stress some players and coaches confided in their significant others (e.g., mentors, senior colleagues) who might provide some assistance to them as means of coping with their stressful experiences. Therefore, it is not surprising that coaches and players evaluated the controllable-by-others as the third most used appraisal mechanism.

Uncontrollable-by-anyone appraisal mechanism was the least utilised strategy reported by the study participants. Some researchers (Bartone et al., 2017; Crawford et al., 2021; Hanton et al., 2012; Kristiansen et al., 2011; Lea et al., 2018) have suggested that social support and networks have the potential to minimize the impact of stress on individuals. For example, Didymus (2017) showed that a coach sought for expert advice from other coaches when he was faced with the stressful decision to select the right team for a successful match or competition due to unclear criteria and procedures for selection. Similarly, players who get stressed because they want to do anything possible to get selected for a forthcoming match or competition may be controlled by others (Fletcher et al., 2006). This observation further reveals that the study participants felt that there was mostly someone to resort to for help (i.e., either themselves or others) and so felt some level of controllability. Thus, when one gets help from others and also obtains information that is desirable from others and they have ample time to address the source of stress, it can give them some levels of control (Gan, Anshel, & Kim, 2009). Therefore, it is not surprising that this observation has been made in the current study. The results on the stress appraisal mechanisms of football coaches and players illustrated a good trend since the appraisal strategies used by the participants were positive and ensure positive growth. This pattern

reflects in the transactional theory of stress, which highlights the mediating role of appraisal in the relationship between stressors and coping strategy (Lazarus, 2000; Lazarus & Folkman, 1984).

The controllable-by-self coping strategy as adopted by the GPL players in the current study contradicts previous research. For example, Hanton et al. (2012) discovered that elite sport performers mainly appraised sources of organisational stressors as harmful or threatening with little perceived control and few coping resources available. However, their study sampled only four elite athletes. This finding could potentially explain the discrepancies in the observed results. Importantly, elite and non-elite sport performers have different characteristics, especially when the study context differ (Hanton et al., 2012). Similarly, Calmeiro et al. (2014) also found that non-elite sport performers largely adopted negative appraisal measures. Although both studies used participants who were non-elite, the continents (i.e., Europe – Africa) where these studies were carried out may have contributed to the differences in the results.

# Coping strategies adopted by football coaches and players in the premier league in Ghana

Research Question three examined the coping strategies adopted by football coaches and players in the premier league in Ghana. Results indicated that coaches and players employed problem-focused coping strategies. This noted finding is consistent with previous studies (e.g., Calmeiro, Tenenbaum, & Eccles, 2014; Didymus & Fletcher, 2017a; Goyen & Anshel, 1998; Kristiansen & Roberts, 2010; Kristiansen et al., 2012). For example, Goyen and Anshel found in their study that male athletes preferred problem-focused

coping strategies in responding to stressors, such as injury, pain and criticisms. The noted similarities in the findings could be attributed to perhaps, the gender of the respondents. That is, this study only focused on male athletes which provide tentative support that males usually prefer to face their stressors with minimal emotional expressions to avoid being labelled as soft or feminine in the face of others from a cross-cultural perspective. For example, investigations from Hagan et al. (2017) on the interaction between gender and skill on competitive state anxiety suggested that similar to other African cultures, the Ghanaian culture expects males to demonstrate hardiness, resilience and bravery towards negative emotions like depression, distress and anxiety. Hence, males who display these emotions physically and/or openly are viewed as not goal-oriented, cowards, weak and lack the desire to compete and succeed. These cultural perceptions could be a reason why these male football coaches and players in the present study indicated that they were in control to show their strength, capabilities and readiness to face the challenges that confronted them. Similarly, Kristiansen et al. (2012) also conducted their study using US male football teams and found problem-focused coping to be a dominant coping strategy adopted by the soccer players. From a theoretical lens, the goodness-of-fit explanation (Folkman, 1992) suggests that when one encounters a stressor that is controllable, the problem-focused coping strategy should be deployed. The logic here is that, because the stressor is controllable, a strategy that is designed to directly influence or alleviate the stressor will be most effective. However, when individuals are faced with an uncontrollable stressor, individuals should utilise emotion-focused coping strategies because attempts to change the stressor will be flawed because the stressor is

uncontrollable. Thus, it is possible that issues of control are central to the coping process in sport, and it could be that athletes evaluate many stressors as being at least partially controllable.

This noted finding suggests that the coaches and players can cope with the situation by facing or confronting the problem as it persists by directly dealing with the issue as opposed to coping with it emotionally. Explaining this coping perspective, some scholars (e.g., Kerdijk, Van Der Kamp & Polman, 2016; Roncaglia, 2014; Russell, Cottingham, Barry, Lee & Walsh, 2018) view the concept of problem-focused coping as effortful response to stress, whereas emotion-focused coping reflects internal processes based on distraction that is intended to manage or palliate one's emotional reaction to the stressor. For instance, when the players are stressed because they want to be selected to be part of the first team, the only means of coping with that stress is to devise means of confronting the situation (e.g., making plans and increasing one's effort to cope with the situation) as it is rather than facing it with their emotions (e.g., crying, feeling upset) (Fletcher & Arnold, 2017; Fletcher & Scott, 2010; Mellalieu et al., 2009; Neil et al., 2011).

The most common coping strategy adopted by the coaches and players was the increasing effort strategy. This implies that the coaches and players in the Ghana premier league cope with their stressful situations by putting in extra effort to overcome the possible devastating effects of the situation. This finding suggests that for the stressful situations not to outweigh them, coaches and players try as much as possible to improve or enhance their performance. When this happens, the situation that causes stress to coaches and players might have less impact on their lives, but would rather feel challenged and

would subsequently manage perceived stressors effectively. Another reason can be that the coaches and players worked harder as a way of managing the stressors they faced. For example, coaches who want to avoid technical, tactical and decision-making errors during competitions would like to spend more time working on the players and themselves to attain their goals (Akenteng, 2019; Nicholls et al., 2016).

The second most used coping strategy indicated by both the coaches and players are active coping and planning, respectively. Conventionally, coaches concentrate on what has to be done one step at a time in order not to be overburdened with a lot of issues at a particular time. This result further implies that coaches might have taken actions that could directly manage their stressful experiences, rendering the situation less impactful and demanding. This finding could be as a result of the accumulation of domain-specific knowledge in coaching (Calmeiro et al., 2014). For example, Levy et al. (2009) conducted a study to examine the stressors, coping and coping effectiveness of an elite coach and found planning as a major coping mechanism adopted by the coach who indicated thinking ahead, managing time effectively and gathering information on the performance of players as the specific ways of coping using planning. One reason why players also employed planning as the second strategy for coping with stress could be that the players have been made to be aware of the importance of planning in managing stressful situations; hence, preferred using planning as a strategy for coping. This finding corroborates the observation of Nicholls et al. (2007) whose study explored stressors, coping and coping effectiveness and found that national athletes used more planning to cope with stressors they

experienced in the environment within which they were operating (Nicholls et al., 2007).

# Contributions of age and years of experience to organizational stressors among football coaches and players in the premier league in Ghana

Research Question four examined the contribution of age and years of experience to organizational stressors among football coaches and players in the premier league in Ghana. Simply put, there was no interaction between age and years of experience on the organisational stressors of coaches and players. This finding is quite surprising and defies already established knowledge that age and years of experience significantly affect stress or affect experiences of sport performers (Hagan et al., 2018). For example, skill classification that exists indicates the likelihood that an athlete who is regarded as highly skill would have a very low experience because of a sudden increase in her or his sport performance (Hagan et al., 2018). Additionally, chronological age which is closely linked with competitive experience possessed by athletes could also influence competitive anxiety. There is therefore the possibility that more experienced or older athletes might be minimally affected by related anxiety symptoms more than less experienced or younger performers who might be skilled or not skilled (Hagan et al., 2018). For example, Hammermeister and Burton (1995) found in their study that older endurance athletes demonstrated less significant cognitive anxiety than their counterparts who were younger because they adopted fewer ego-threatening goals during participation. Likewise, other researchers have reported minor symptoms of cognitive state anxiety in more experienced and older athletes (Modrono, 2011; Sanchez-Garcia, 2004).

Taken together, differences in cultures may have potentially affected the current findings in this study. For instance, ethnic identity which is referred to as a construct that is multidimensional includes an individual's sense of belonging to a particular ethnic group and the formation of manners, feelings, thoughts, perceptions and behaviours that are linked with membership of that particular ethnic group (concept of self: Markus and Kitayama, 1991; Phinney and Rotheram, 1987). Hence, stress and the demonstration of feelings cannot be seen to be common across other cultural settings (Hagan et al., 2017). Anecdotal evidence indicates that similar to other African cultures, Ghanaian males are obviously supposed to demonstrate resilience, bravery and hardiness toward negative emotional encounters, including distress, anxiety and depression. The above experiences could lead to increased panic, apprehension, fear and other physiological effects within individuals (Fischer, 2000). Within Ghanaian culture, Males who openly show negative emotions are tagged as lacking the desire to succeed, not competitive and not goal-oriented. These people are mostly faced with guilt, shame and a gradual rejection because such people are perceived as cowards. There appears to be a lack of cross-cultural research that aims at comparing African sport performers to their Western counterparts using the OSI-SP. Future studies should consider using this method since there are varied internal processes and social behaviors due to an individual's cultural identity.

Apart from the culturally specific reasons that could account for the current findings, the non-significant difference in the stressor levels of coaches and players with regards to age and years of experience can be accounted for by two other reasons. First, the sample size and within cell samples for both

coaches and players appear insufficient and thus could affect the power of the statistical procedure used (Pallant, 2010). Taking the coaches, for example, only 44 of them participated in the study. This sample resulted in some of the categories having a small sample cell size. Second, the "football age" phenomenon in football can account for such a result. The "football age" phenomenon happens when football players reduce their original age to appear young. Tosam (2015), for example, argues that players usually cheat about their actual age by providing a reduced age, a typical behaviour of many African athletes. Although efforts were made by the researcher to obtain the real ages of the players, it was unclear whether the players provided their real ages or "football ages". A closer look at the demographic data, for instance, show that the majority of the players were 20 years and below. Some of these players indicated that they had 5 years of experience in the premier league. Such inconsistencies can explain why the results show a non-significant difference in stressors with regards to age and years of experience. Moreover, most coaches and players are employed on contract basis for one year or at most, two years. These contracts are renewed only based on performance. Therefore, it is unlikely that especially coaches would coach one team for many years except in few instances (Akenteng, 2019).

# Association between stress appraisals and coping styles among football coaches and players in the premier league in Ghana

Research question five examined the association between stress appraisals and coping styles among football coaches and players in the premier league in Ghana. The study found that only controllable-by-self was associated with coaches' problem-focused coping (active coping, and

planning) strategies. The rest of the variables under the stress appraisal mechanism (i.e., threat, challenge, centrality, controllable by others, uncontrollable by anyone) did not influence any of the coping styles of the football coaches. Previous studies (e.g., Nicholls et al., 2011; Nicholls et al., 2014; Thelwell et al., 2008; Thelwell, 2012; Lazarus and Folkman, 1984; Lazarus, 2000) have indicated that it is when a person evaluates a situation as relevant or important to his or her goals at the primary appraisal stage, that he or she considers the available resources (i.e., sense of being in control, knowledge, skills, self-confidence) to cope with such a demand before using a particular coping style. The finding implies that when coaches evaluate the stressors, they experience as controlled-by-themselves, they are more likely to plan and take direct actions toward identified stressors and vice versa, suggesting that when a coping disposition is stable, it will employ a dynamic impact on the process of stress appraisal (Buntrick & Reddy, 1992; p. 1229).

Reflected in Gan et al. (2009), Conway and Terry (1992) investigated Australian University students and found problem-focused coping to be efficacious, adaptive and used in situations of perceived controllability while emotion-focused coping was used in situations of less controllability. With a similar objective, Gan et al. (2009) found that athletes with an approach coping style which they equated to problem-focused coping were less likely to make the appraisals control-by-self and control-by-others than athletes with an avoidance coping style which was also juxtaposed as emotion-focused coping. Since lower scores were equated with higher levels of perceived controllability, Gan and partners concluded that athletes with a problem-

focused coping style were more likely to appraise the stressful event as highly controllable, as opposed to competitors with an emotion-focused coping style.

Calmeiro et al. (2014) also explored appraisal and coping processes of two elite and four non-elite trap shooters during major competitions. Calmeiro et al. found that "both elite athletes reported fewer negative appraisals than all but one non-elite athlete generally and during critical periods specifically" (p. 1817). Also, Calmeiro et al. (2014) observed that "both elite athletes were more likely to follow a negative appraisal with some form of coping" (p. 1818). However, non-elite athletes were more likely to take the next target without reporting any form of coping following a negative appraisal.

For players, associations are drawn between the specific dimensions of stress appraisal strategies and the coping styles. Other results showed that controllable-by-self and controllable-by-others significantly challenge, influenced problem-focused coping (i.e., active coping and planning) style of players. The finding implies that, as players evaluate the stressors they experience as a challenge that they need to overcome, they are able to plan and take the necessary actions that can be used to directly manage those stressors. This result is consistent with the results of Nicholls et al. (2011) who investigated stress appraisals, emotions, coping and performance satisfaction among athletes using a path analysis and found that challenge appraisals were connected with perception of control and focusing on task for coping while appraisals of threat were associated with perceived lack of control and disengaging oneself from the task (Nicholls et al., 2011). Similarly, Hoar et al., (2006) concluded that when perceptions of control increases, problemfocused coping will be more frequently utilized.

Further, controllable-by-self, controllable-by-others, and uncontrollable-by-anyone were significantly related to players' problem-focused coping behaviours on seeking social support for instrumental reasons. Additionally, challenge and controllable-by-self significantly influenced players' problem-focused coping behaviours on increasing effort. This finding implies that players who evaluated their stressors controlled-by-themselves, are more likely to seek social support as well as increase their efforts in managing their stress experiences. Additionally, when players evaluate stress as a challenge, they usually increase their effort in response in managing stressful events (Kristiansen et al., 2012).

Threat and uncontrollable-by-anyone were found to be significantly associated with players' coping behaviours on seeking support for emotional reasons. The results also revealed that threat, controllable-by-others and uncontrollable-by-anyone significantly influenced players' coping behaviours on venting emotions. Threat and uncontrollable-by-anyone significantly influenced players' coping behaviours on self-blame. These results are consistent with findings by Nicholls et al. (2011) which showed that athletes who appraised their stressors as uncontrollable-by-anyone felt threatened and used more negative emotions, got distracted and adopted more disengagement-oriented coping. This finding indicated that when players evaluated stress as a threat (i.e., having a negative outcome) or a situation that could be controlled by anyone, they were likely to seek emotional support to help them cope with the situation. More so, when players appraised stress as a threat, a situation that could be controlled by others and a situation that could be controlled by

others, they often showcased emotional reactions as a way of managing their stressors (Nicholls et al., 2011).

Generally, stress appraisals of football coaches and players were associated with coping strategies they employed when they experienced stressors. That is, how coaches and players appraised the stressors they encountered would show how they coped with them. This perspective is reflected in the transactional model of stress and coping which highlights that stress emanates from the stressors of the environment, how these stressors were appraised, and the coping strategies to use and the interactions would determine whether its effect would be debilitative or facilitative to the individual (Fletcher et al., 2006; Hanton et al., 2012; Mellaliue et al., 2009). This implies that coaches and players who appraise the stressors they face as something they cannot handle, will adopt emotion-focused coping strategies (e.g., venting of emotions and self-blame) that may be dysfunctional or maladaptive toward their overall well-being. Likewise, those who appraise the stressors they face as a challenge, for example, will adopt problem-focused coping strategies like active coping and planning (Didymus & Fletcher, 2014; Mellalieu et al., 2009; Nicholls et al., 2012) which involves having a backup plan, developing a plan, planning for competition and being realistic about time commitments (Didymus, 2017).

# **Practical Implications**

Football coaches and players experience a variety of stressors within their working environments considering the findings of the current study. The study revealed that interventions aimed at helping football coaches and players in stressful situations should be geared towards managing issues related to

selection, team and culture, goals and development as these were found to be the most reported organisational stressors, they encountered during the 2020/2021 premier league season. Even though organisational stress had been viewed as not only detrimental to wellbeing (Fletcher et al., 2006; Fletcher & Scott, 2010), it was clear that when individuals experienced stressors, there was the need to positively appraise the situation and use effective coping mechanisms to deal with those stressors. Failure or inability to evaluate and effectively cope causes psychological, physiological, physical and behavioural strain that affects the performance, mental health and general well-being of the individual (Arnold et al., 2016; Fletcher et al., 2012; Fletcher & Scott, 2010; Olusoga et al., 2010; Tabei et al., 2012; WHO, 2019). This finding has implications for applied practice and research. For applied practitioners, interventions involving the use of a standard guideline or performance-related indicators that are clear for selection for both coaches and players in the discharge of their duties might help to address or minimise their demand. Further, a selection procedure that is based on objective and subjective assessments on performance-related indicators should be developed by the clubs in the Ghana premier league to provide some autonomy to these coaches to control certain pertinent decisions regarding selection.

Considering team and culture as a stressor, club owners should adopt mechanisms, such as good channels and skills of communication, conflict resolution benchmarks and ensuring fair and transparent procedures within the team would promote group and team dynamics. Club owners should also listen to plights and concerns of their employees to develop consensus; provide coaches and players with a strong support base and build a strong team

cohesion. Regarding goals and development as a stressor, club owners and organisers of the league should develop a goal-setting framework that promotes respect for training and development for the coaches and players by using Specific, Measurable, Achievable, Realistic and Time bound (SMART) goals. Additionally, as a matter of preventive intervention, it will be prudent for owners of clubs to assist coaches and players by providing adequate and standard facilities and resources (both human and material) that can help them to train adequately to achieve their aims. Such interventions can be done through educational and career development workshops, skills development and assessment programmes, assertiveness training, time management training, informal and formal group conversations can all be used to facilitate well-being and reduce the stress levels of coaches and players (Cassidy et al., 2006; Frey, 2007).

The study also found that the coaches and players in the GPL reported that the organisational stressors they experienced were controlled by themselves (or they have high self-control). This finding provides evidence on the importance of self-regulation or self-control in the management of stress. It is important that the coaches and players in the GPL continue to develop certain personal traits, such as resilience, hardiness, mental toughness and emotional intelligence (Bartone et al., 2017; Hanton et al., 2012; Lea et al., 2019). These attributes ought to be trained and developed through appropriate hardy and resilience psychological interventions that focus on commitment, control and challenge (Maddi, 2012). According to Fletcher and Scott (2010), coaches need to acquire traits and skills that will help them to develop psychological resiliency in situations that are demanding. They

further indicated that hardiness training improved motivation and commitment among coaches which could also be workable for the playing population (footballers) in this study. Designed interventions should focus on helping both coaches and players gain a sense of control and to view stressors as challenges, but not hindrances. Hence, developing a general sense of autonomy and self-reliance might be seen as appropriate coping strategies for stress management (Lazarus, 2000).

Other findings showed the relevance of significant others, social support network, and organisational culture in coping with organisational stressors by coaches and players ((Norris et al., 2017; Mitchell et al., 2014). Therefore, providing bonding through familiar and other social support networks that are often characterised by the presence of team warmth, cohesion, structure, emotional support, positive attachment and a close bond with the team would be helpful along the stress continuum (Fletcher et al., 2006; Murphy, 1995). Teams in the GPL should continuously provide the necessary social support through avenues that may foster strong bonding between coaches, players and significant others (e.g., club supporters, support staff, management members, administrators, other playing or coaching colleagues, friends and family). The social connectedness would go a long way to minimise the detrimental effects of stress on their health.

The t finding also revealed that experiencing stress involved series of cognitive appraisals of situations as stressful. Hence, appraising stressors negatively may lead to a maladaptive coping and vice versa. Therefore, it is vital to design interventions that develop specific positive cognitive appraisals of football coaches and players in Ghana. Giges and colleagues (2004)

revealed that sport psychologists can help sport performers to become aware of their thoughts, feelings and behaviours. They stressed that having appropriate questioning and discussion sessions can elicit basic beliefs and needs of those concerned by providing strong foundation to develop interventions and effect a change.

Mostly, given that problem-focused coping strategy was reported as employed coping strategy by both coaches and players in the GPL, developing effortful response to stress would be impactful (Kerdijk et al., 2016; Russell et al., 2018; Roncaglia, 2014). Coaches and players in the GPL should continuously be empowered through education on how to build their capacity in dealing with or focusing their efforts on the stressors as they encounter as opposed to using their emotional reactions as coping strategies. The later strategy (e.g., venting emotions) has been found to be dysfunctional or maladaptive to the performance and well-being in sport psychology literature (Anshel & Anshel, 2015; Fletcher et al., 2006; Fletcher & Scott, 2010). Previous studies (Gaudreau et al., 2010; Nicholls et al., 2011) have shown that utilising task-oriented coping dimension and not disengagement or distractionoriented coping enhance performance in sport. Nicholls et al. (2011) further suggested to practitioners to include thought control, mental imagery, effort expenditure and logical analysis and integrate these with appraisal training which include encouraging players on what they can gain from a situation that is stressful (e.g., gaining national selection, securing a contract professionally and /or winning a championship) to augment coping. Nicholls et al. (2010) also supported the view that the use of mental imagery, thought control, effort expenditure and logical analysis strategies of coping with a challenge appraisal

can produce pleasant emotions when experiencing a stressful situation. Moreover, Turner and Jones, (2014) confirmed the importance of cognitive appraisals in the stress process of coaches stating that awareness of this can assist practitioners to effectively manage stress and suggest to practitioners to use instructional sets as interventions to enhance cognitive appraisals together with imagery (Williams & Cumming, 2012) and reappraisal (Jamieson et al., 2012) and appraisal training.

The study found that only controllable-by-self was associated with the coaches' active coping and planning coping strategies. Based on these findings, it was speculated that because interference with the coach's decisions by club owners, team managers, league organisers, politicians, media, supporters, friends and even family, was a common practice within the Ghanaian football context, a coach's self-control was mainly influenced by his or her level of active behavioural engagements and reengagements through planning. Hence, failure to develop a well thoughtful planning has the potential to destabilize coaches by putting enormous burden on them.

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#### **CHAPTER FIVE**

### SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The purpose of this study was to assess stress appraisals and coping styles among Ghana Premier League coaches and players in 2020/2021. Aside the research exploring the organisational stressors, stress appraisal mechanisms and coping styles of coaches and players, the extent to which age and years of experience interact between organisational stressors were examined. This chapter summarises, draws conclusions and make recommendations based on the major findings of the study.

# **Summary**

The study was grounded in the positivist paradigm; further making use of the descriptive cross-sectional research design. This study covered a wide geographical area in Ghana since there was a total of eighteen teams in the 2020/2021 Ghana premier league; out of which seventeen teams took part in the study. The population for this study had two groups: all 2020/2021 Ghana football premier league coaches and players. The estimated size of the population included 540 players and 54 coaches making a total of N = 594. The entire sample constituted only males, with ages ranging from 16 to 31 years for players and 31 to 70 years for the coaches respectively. Years of experience for players ranged from 1 to 15 years and 1 to 17 years for coaches. Although a total of 594 participants were initially sampled for the study, valid responses received were 424 (78.5%) and 44 (81.5%) from players and coaches respectively. The total sample of study participants was 468.

Questionnaire was used for the data collection. The questionnaire had four main sections: demographic section, OSI-SP scale formed the second

part, the SAM scale and the MCOPE inventory. All COVID-19 protocols were observed before, during and after the data collection. Descriptive statistics, factorial MANOVA and multivariate multiple regression were used to analyse the data.

## **Key Findings**

The following were the key findings of the study:

- 1. It was found that the coaches experienced significantly higher levels of stress as compared to the players. Taking the selection indicators, for instance, coaches were burdened on how selection should be done for matches whereas players were stressed on how to get selected into their teams for matches. Both players and coaches also experienced stress in the pursuit of their goals in their career and also to develop from one level to another. Similarly, the team atmosphere and culture presented some levels of stress for the coaches and players.
- 2. The results showed that the stress appraisal mechanism frequently employed by the football coaches and players was controllable-by-self. Both the coaches and players reiterated that they also used the challenge stress appraisal mechanism quite often aside the controllable-by-self stress appraisal strategy. The third most used appraisal mechanism adopted by both the coaches and players was controllable-by-others appraisal strategy. The least adopted stress appraisal mechanism by both coaches and players was found to be uncontrollable-by-anyone strategy.
- 3. The study revealed that both the coaches and players were found to be using the problem-focused coping strategies. The most common

coping strategy adopted by the coaches and players was the increasing effort strategy. The second most used coping strategy indicated by both the coaches and players was active coping and planning. Planning was the third most used coping strategy among the coaches. However, the players reportedly used active coping.

- 4. Other results revealed that experience, age and experience-by-age did not significantly influence the specific dimensions of organisational stressors for players as measured by the OSI-SP.
- 5. It was also revealed that challenge, controllable-by-self and controllable-by-others significantly influenced the active coping style of players. Again, challenge, controllable-by-self and controllable-by-others were also found to significantly influence the planning coping style of players. Further, controllable-by-self, controllable-by-others and uncontrollable-by-anyone significantly influenced players coping behaviours on seeking social support for instrumental reasons. Similarly, challenge and controllable-by-self significantly influenced players coping behaviours on increasing effort. Threat and uncontrollable-by-anyone were found to have a significant influence on players coping behaviours on seeking social support for emotional reasons. Threat, controllable-by-others, and uncontrollable-by-anyone also significantly influenced players coping behaviours on venting emotions. Players coping behaviours on self-blame were influenced by threat, and uncontrollable-by-anyone.

### **Conclusions**

Based on the findings of this study, it is concluded that football coaches and players who participated in the 2020/2021 GPL season:

- Experienced similar stressors on selection, team and culture, and goals
  and development but coaches experienced these stressful situations
  more than the players.
- 2. Demonstrated a homogeneity of stress appraisal mechanisms and viewed their stressful experiences more as challenges that they could overcome or manage.
- 3. Reportedly used more problem-focused coping mechanisms (increasing effort, active coping and planning) than emotion-focused coping mechanisms (seeking social support for emotional reasons, venting of emotions, self-blame) when they experienced stressful encounters.
- 4. Ages and years of experience had no influence on their stress levels.
- 5. The type of stress appraisals used directly predicted the type of coping mechanisms used. Thus, coaches and players who used facilitative appraisal mechanisms adopted facilitative coping mechanisms and vice versa.

# **Recommendations for Policy and Practice**

Based on the study findings, it is recommended that:

 The technical directorate of GFA in collaboration with the premier league coaches in Ghana should develop a framework as selection guideline, incorporating specific criteria and procedures that are objective, clear and standard for selecting players. Creating

awareness of these procedures would promote transparency, trust and confidence between coaches and players that will boost team climate, culture and thus, minimise uncertainty and insecurity. Again, owners of premier league clubs should avoid direct and indirect interferences on performance-related decisions, especially on selection issues. Such decisions should be the preserve of coaches and the technical team, whose job security may be at stake because of performance related outcomes. Club owners should also adopt mechanisms, such as good channels of communication, conflict resolution benchmarks and listening to the plights and concerns of both coaches and players through informal and formal group conversations or club meetings. Ensuring fair and transparent procedures within the clubs will promote between and within group and team dynamics that would lessen conditions that may generate stressful experiences. Further, through skills development and assessment programmes, sport psychologists should help club owners to develop a goal setting framework that maintains respect for training and career development for both coaches and players. Sport psychologists should assist club owners as well as coaches and players in the Ghana premier league to set challenging, but realistic short to long term goals. Evaluative or appraisal mechanisms are suggested to help monitor goals and developmental priorities set by coaches and players. Sport psychologists should help to inspire coaches and players to develop other alternate and/or strategic ways to achieve progressive development and performance successes (Carver & Scheier, 2005).

Opportunities should also be created for coaches and players to professionally develop themselves through relevant courses by providing scholarships and sponsorships for self-development through local and international collaborations.

- 2. Sport psychologists should organise regular psychological or mental training workshops on stress management for coaches and players. Of more relevance would be specific interventions (e.g., thought stoppage, cognitive restructuring, imagery, appraisal and reappraisal training through instructional sets) as coping mechanisms to effectively help coaches and players control and appraise organizational stressors as mere as challenges rather than threats (Didymus and Fletcher, 2017; Jamieson et al., 2012; Nicholls et al., 2016; Turner et al., 2014; Williams & Cumming, 2012).
- 3. Sport psychologists should design and implement a variety of functional coping strategies (e.g., planning, increasing effort and active coping) through workshops and seminars to help football coaches and players deal with the pressures associated with their career before and during competitive seasons (Didymus & Fletcher, 2014).

## **Suggestions for Further Studies**

The present study has implications for further studies. Therefore, future research should consider both genders (females and males) as well as multiple sport disciplines that will take into consideration, more detailed socio-demographic information to ascertain how other factors can also influence the stress process in relation to wider sports population. Secondly, since stress is

dynamic or transactional process, using ecological momentary assessments like the experience sampling method may unearth coaches and players dynamic image of their stressful experiences for appropriate coping intervention using a longitudinal design (Cerin et al., 2001; Hagan et al., 2017). Because the frequency and duration dimensions of the OSI-SP questionnaire were excluded in the study, future studies should also consider using all the measurement scales on the OSI-SP questionnaire to ensure that there is no threat to internal and external validity as well as provide more robust findings through cross-cultural validation studies (Arnold, Ponnusamy, Zhang, & Gucciardi, 2017; Arnold, Fletcher, & Daniels, 2016; Arnold et al., 2013; Liu et al., 2018). Furthermore, because of the one snapshot and retrospectively self-reported nature of the data collected, there's no evidence to ascertain whether coaches and players were merely reporting their stressors, appraisals and coping mechanisms or these experiences were really encountered. Future research should therefore use an intervention approach to test the effectiveness of these stress-related experiences in real life to guarantee its ecological validity. Since psychological research in elite sport in Ghana is at the nascent stage, future efforts could target other important stressrelated factors that were beyond the scope of the research. For example, stress appraisal process may be affected by other personality attributes such as conscientiousness (Rafferty & Griffin, 2006), neuroticism (Hemenover, 2001; Rafferty & Griffin, 2006), extroversion (Hemenover, 2001), hardiness (Chan, 2003; Hamilton & James, 2006), and the environmental (e.g., social support, Kahn et al., 2003) resources (Meeks et al., 2003).

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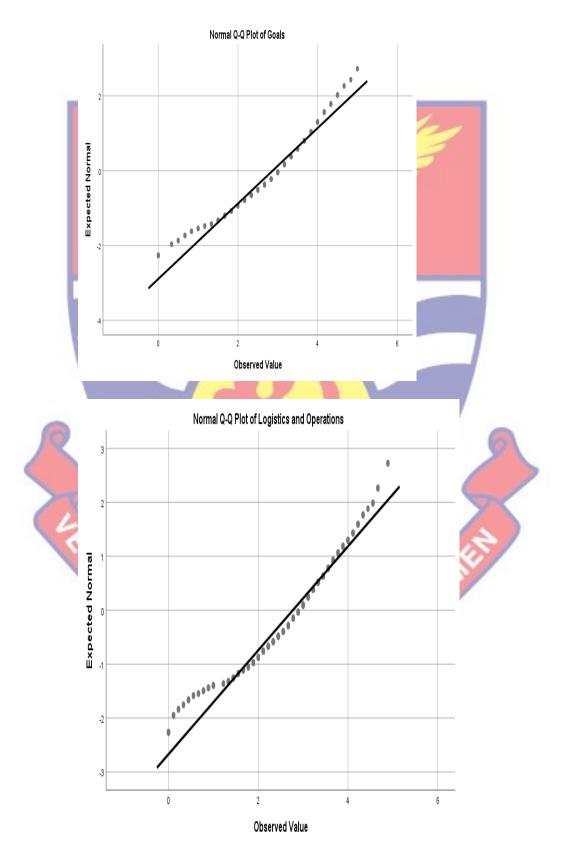
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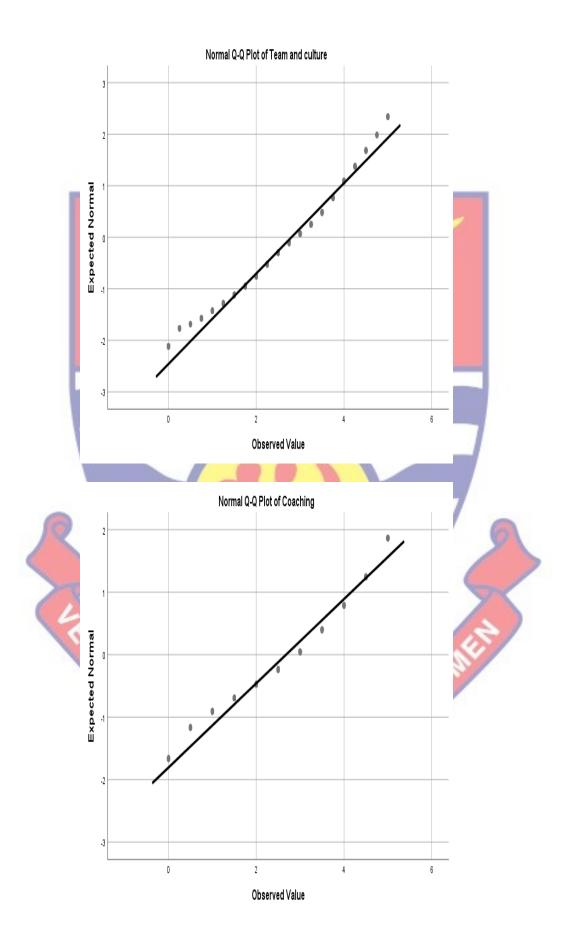
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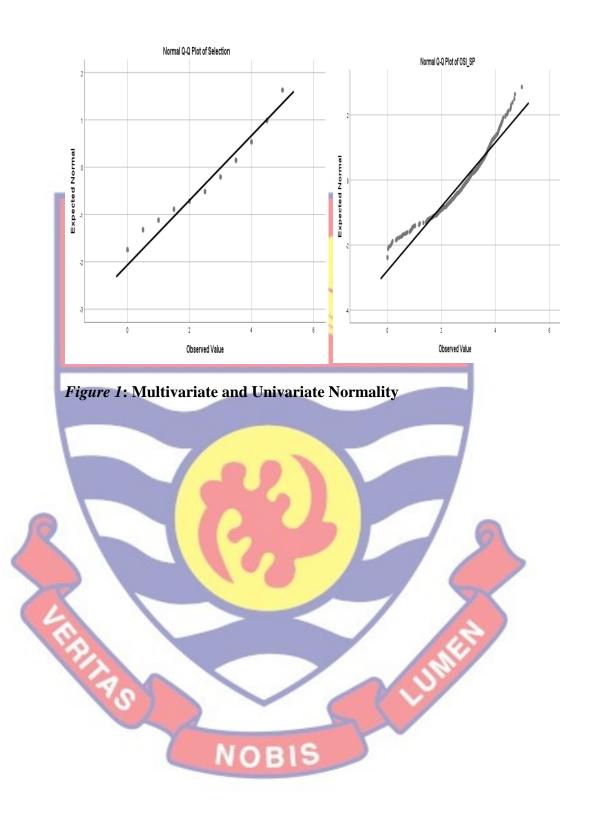




## APPENDIX A UNIVARIATE AND MULTIVARIATE NORMALITY







# APPENDIX B MULTIVARIATE OUTLIERS AND LINEARITY

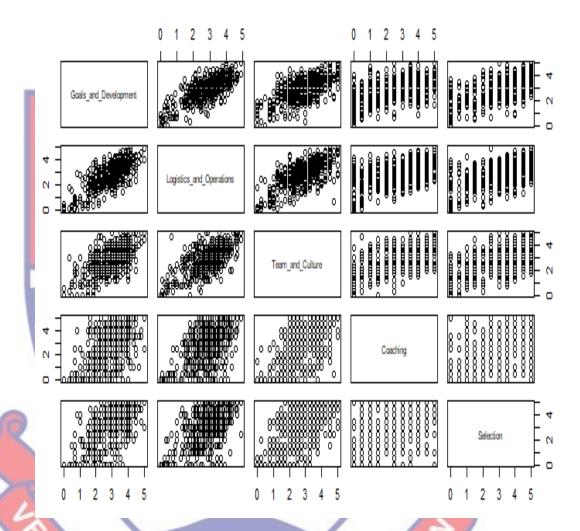


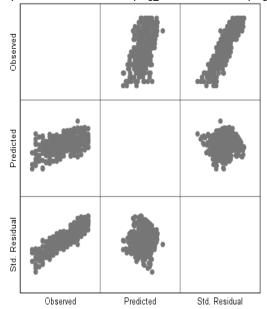
Figure 2: Multivariate Outliers and Linearity

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#### **APPENDIX C**

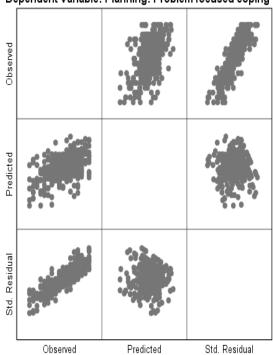
#### **RESIDUAL PLOTS**

#### Dependent Variable: Active coping\_Problem focused coping

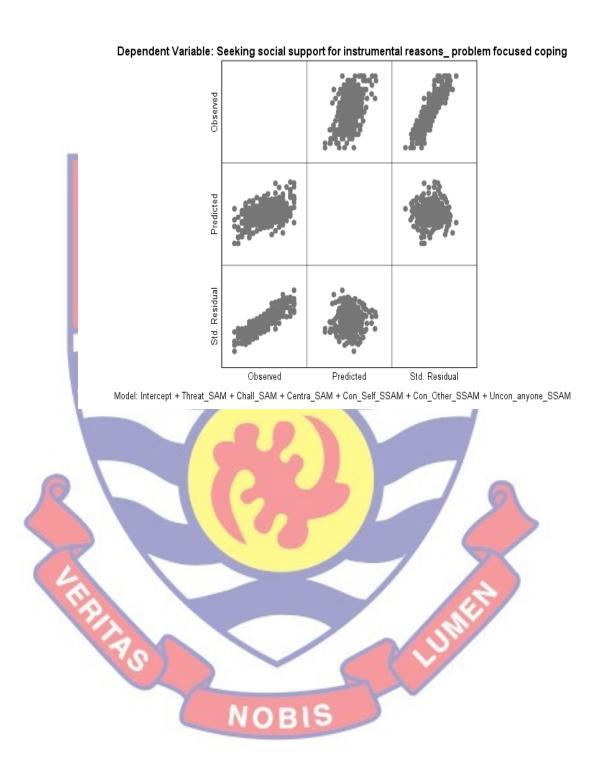


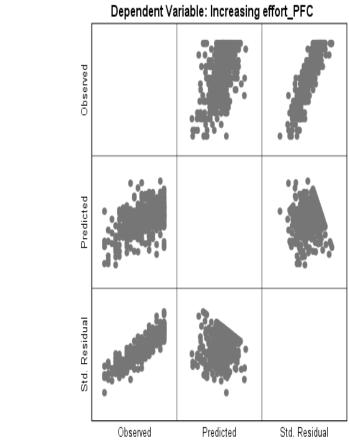
Model: Intercept + Threat\_SAM + Chall\_SAM + Centra\_SAM + Con\_Self\_SSAM + Con\_Other\_SSAM + Uncon\_anyone\_SSAM

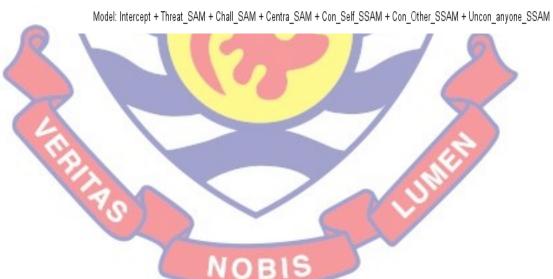
#### Dependent Variable: Planning: Problem focused coping



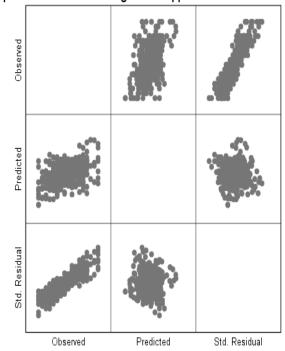
Model: Intercept + Threat\_SAM + Chall\_SAM + Centra\_SAM + Con\_Self\_SSAM + Con\_Other\_SSAM + Uncon\_anyone\_SSAM





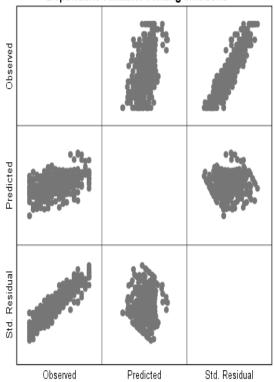




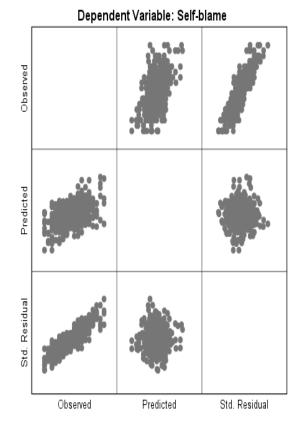


Model: Intercept + Threat\_SAM + Chall\_SAM + Centra\_SAM + Con\_Self\_SSAM + Con\_Other\_SSAM + Uncon\_anyone\_SSAM

#### Dependent Variable: venting emotions



Model: Intercept + Threat\_SAM + Chall\_SAM + Centra\_SAM + Con\_Self\_SSAM + Con\_Other\_SSAM + Uncon\_anyone\_SSAM



Model: Intercept + Threat\_SAM + Chall\_SAM + Centra\_SAM + Con\_Self\_SSAM + Con\_Other\_SSAM + Uncon\_anyone\_SSAM



#### APPENDIX D

#### **QUESTIONNAIRE**

#### UNIVERSITY OF CAPE COAST

#### **COLLEGE OF EDUCATION STUDIES**

# DEPARTMENT OF HEALTH, PHYSICAL EDUCATION AND RECREATION (HPER)

# QUESTIONNAIRE FOR FOOTBALL COACHES AND PLAYERS IN THE 2019/2020 GHANA PREMIER LEAGUE

Dear Coach/Player

I am Medina Srem-Sai, a PhD (Physical Education) student at the Department of HPER, UCC. I am contacting you to participate in this academic research study titled: "Stress appraisals and coping styles among Ghana Premier league coaches and players" This Research aims to examine stressors, stress appraisals and coping styles among the 2019/2020 Ghana soccer premier league coaches and players.

This study requires that you complete a 79-item questionnaire. This may take 45minutes of your time. Your response will be analyzed and generalized.

Your participation in this study is completely voluntary and you are free to even stop answering the items should you find it necessary. Apart from your time, you are assured this study possesses no harm to you, your profession or family as all information provided will be kept confidential.

No information that will identify you is required.

If you fully understand your duties and agree to take part in this research, please sign in the space below

Signatur	re
Date	
F	For any information contact my Supervisors Dr John Elvis Hagan Jnr.
(050005	(8449) or Dr Prosper Narteh Ogum (0243514178).
You m	ay also contact me (Medina) on 0208539518/0548497133 or
medinas	ai81@gmail.com
Thank y	ou for your participation.
SECTIO	ON A
Demogr	raphic information:
Name of	ast birthdayf Club
Number	of years playing at the premier level
SECTIO	N B
Organiza	ational Stressor Indicator for Sport Performers (OSI-SP: Arnold et al.
2013)	

**Instructions:** Each of the following questions describes the pressures that you have experienced as part of your participation in the 2020//2021 premier league in the past

15 minutes

month.

#### **Pressure is:**

Those events, situations, or conditions that place a demand on you.

For each question, place a tick ( $\sqrt{}$ ) to indicate how demanding this pressure was for you ("Intensity" column). The scales are; 0. No demand 1. Very low demand 2. Low demand 3. Moderate demand 4. High demand 5. Very high demand

The questions contained within it will take about fifteen (15) minutes to complete. You are assured of confidentiality of your responses.

Please remember that there are no right or wrong answers to the questions because every sport performer is different and their environments are often changing.

#### In the past month, I have experienced pressure (s) associated with

- 1. The responsibilities that I have on my team 0 1 2 3 4 5
- 2. The relationship between my coach/player and I. 0 1 2 3 4 5
- 3. The regulations in my sport 0 1 2 3 4 5
- 4. My coach's/players personality 0 1 2 3 4 5
- 5. The accommodation used for training or competitions 0 1 2 3 4 5
- 6. The training or competition venue 0 1 2 3 4 5
- 7. The organization that governs and controls my sport 0 1 2 3 4 5
- 8. The atmosphere surrounding my team 0 1 2 3 4 5
- 9. How my team is selected 0 1 2 3 4 5
- 10. My teammates/other officials' attitudes 0 1 2 3 4 5
- 11. The spectators that watch me perform 0 1 2 3 4 5
- 12. The food that I eat 0 1 2 3 4 5
- 13. The shared beliefs of my teammates/other officials 0 1 2 3 4 5

- 14. What gets said or written about me in the media 0 1 2 3 4 5
- 15. Selection of my team for competition 0 1 2 3 4 5
- 16. My training schedule 0 1 2 3 4 5
- 17. The organization of the competitions that I perform in 0 1 2 3 4 5
- 18. Injuries 0 1 2 3 4 5
- 19. The funding allocations in my sport 0 1 2 3 4 5
- 20. The development of my sporting career 0 1 2 3 4 5
- 21. The technology used in my sport 0 1 2 3 4 5
- 22. Travelling to or from training or competitions 0 1 2 3 4 5
- 23. My goals 0 1 2 3 4 5

#### **SECTION C**

Stress Appraisal Measure (SAM; Edward J. Peacock & Paul T. P. Wong, 1989)

#### 15 minutes

Instructions: This questionnaire is concerned with your thoughts about various aspects of the situations identified previously. There are no right or wrong answers. Please respond according to how you view this situation right NOW. Please answer ALL questions. For each statement there are five alternative answers. Answer each question by CIRCLING the appropriate number corresponding to the following scale. 1. Not at All 2. Slightly 3.

#### Moderately 4. Considerably 5. Extremely.

- 1. Is this a totally hopeless situation? 1 2 3 4 5
- . Does this situation create tension in me? 1 2 3 4 5
- 3. Is the outcome of this situation uncontrollable by anyone? 1 2 3 4 5

	4.	Is there someone or some agency I can turn to for help if I need it?	1	. 2	3	<b>,</b> 4	1 :	5
	5.	Does this situation make me feel anxious?		1 2	2	3	4 :	5
	6.	Does this situation have important consequences for me?	1	2	3	4	5	
	7	Is this going to have a positive impact on me?	1 2	2 3	3 4	4 5	5	
	8	How eager am I to tackle this problem?	2	3	4	5		
	9	How much will I be affected by the outcome of this situation?		2 3	3 4	4 5	;	
l	10	To what extent can I become a stronger person because of this problem? 1	2	3	4	5		
l	11	Will the outcome of this situation be negative?	1	2	3	4	5	
l	12	Do I have the ability to do well in this situation?	1	2	3	4	5	
l	13	Does this situation have serious implications for me?	1	2	3	4	5	
l	14	Do I have what it takes to do well in this situation?	1	2	3	4	5	
I	15	Is there help available to me for dealing with this problem?	1	2	3	4	5	
١	16	Does this situation tax or exceed my coping resources?	1	2	3	4	5	
	17	Are there sufficient resources available to help me in dealing with this situ	atio	n? 1 :	2 3 4	5		
	18	Is it beyond anyone's power to do anything about this situation?	1	2	3	4	5	
	19	To what extent am I excited thinking about the outcome of this situ	ıatic	n? 1	2	3	4 5	
)	20	How threatening is this situation?	1	2	3	4	5	
	21	Is the problem unresolvable by anyone?	1	2	3	4	5	
	22	Will I be able to overcome the problem?	1	2	3	4	5	
	23	Is there anyone who can help me to manage this problem?	1	2	3	4	5	
Ì	24	To what extent do I perceive this situation as stressful?	4	2	3	4	5	
	25	Do I have the skills necessary to achieve a successful outcome to this situation	ation	? 1 2	3 4 :	5		
	26	To what extent does this event require coping efforts on my part?	1	2	3	4	5	
	27	Does this situation have long-term consequences for me?	1	2	3	4	5	
	28	Is this going to have a negative impact on me?	1	2	3	4	5	

#### **SECTION C**

Modified COPE (MCOPE; Crocker and Graham, 1995)

#### 15 minutes

Instructions: This questionnaire is concerned with what you did in order to cope or deal with stressful situations in your coaching/playing role. Please take a minute to think again about how you felt during the last competition that you coached in/played in, specifically, the stressful situations that you encountered as a coach/player and what you did to handle the situation.

Below are series of statements. Please indicate (by circling the appropriate number) how much you used each strategy to handle the stressful situations you are thinking of (Scale 1: 1= Used very little/not at all, 2= Used a little, 3= Used Somewhat, 4= Used Much, and 5= Used very much). Please be informed that coaches as well as players vary in the sort of things they do to cope with or handle stressful situations, so please be aware that there are no right or wrong answers and answer as honestly as you can.

1. I asked other coaches/players what they did or would do	T	2	3	4	5	
2. I talked to someone about how I felt				4	_	
3. I blamed myself for the situation	1	2	3	4	5	
4. I made a plan of action	1	2	3	4	5	
5. I dealt only with my coaching/playing performance difficulties even if I had to forget other						
things	1	2	3	4	5	
6. I felt a lot of upset feelings and I showed those feelings a lot	1	2	3	4	5	
7. I tried to increase the quality of my performance	1	2	3	4	5	
8. I tried really hard to do something about my performance		1	2	3	4 5	

9. I talked to other coaches/players to find out more about my performance 1 2 3 4 5
10. I got support and understanding from someone 1 2 3 4 5
11. I thought hard about what steps to take to manage this situation 1 2 3 4 5
12. I got upset and let my feelings out  1 2 3 4 5
13. I put more effort into my coaching/playing performance 1 2 3 4 5
14. I did what had to be done, one step at a time 1 2 3 4 5
15. I tried to get help from someone about what to do  1 2 3 4 5
16. I talked about my feelings with someone 1 2 3 4 5
17. I decided I was at fault for my performance 1 2 3 4 5
18. I lost my cool and got upset 1 2 3 4 5
19. I tried to improve my effort 1 2 3 4 5
20. I took direct action to overcome the performance challenge 1 2 3 4 5
21. I talked to someone who could do something about my performance 1 2 3 4 5
22. I tried to get help from my coach/teammates to deal with my feelings 1 2 3 4 5
23. I took responsibility for what had happened 1 2 3 4 5
24. I tried to think about a plan about what to do  1 2 3 4 5
25. I let negative feelings out  1 2 3 4 5
26. I worked harder 1 2 3 4 5
27. I tried different things to improve 1 2 3 4 5
28. I told myself "this performance isn't real"  1 2 3 4 5

# THANK YOU FOR COMPLETING THE QUESTIONNAIRE

#### APPENDIX E

#### ETHICAL CLEARANCE

# UNIVERSITY OF CAPE COAST

## INSTITUTIONAL REVIEW BOARD SECRETARIAT C/O Directorate of Research, Innovation and Consultancy

TEL: 0558093143 / 0508878309/ 0244207814 E-MAIL: irb@ucc.edu.gh OUR REF: UCC/IRB/A/2016/794 YOUR REF: OMB NO: 0990-0279 IORG #: IORG0009096



28<sup>TH</sup> AUGUST, 2020

Ms. Medina Srem-Sai

Department of Health, Physical Education and Recreation University of Cape Coast

Dear Ms. Srem-Sai.

### ETHICAL CLEARANCE - ID (UCCIRB/CES/2020/42)

The University of Cape Coast Institutional Review Board (UCCIRB) has granted Provisional Approval for the implementation of your research protocol Stress Appraisals and Coping Styles among Ghana Premier League Coaches and Players. This approval is valid from 28th August, 2020 to 27th August, 2021. You may apply for a renewal subject to submission of all the required documents that will be prescribed by the UCCIRB.

Please note that any modification to the project must be submitted to the UCCIRB for review and approval before its implementation. You are required to submit periodic review of the protocol to the Board and a final full review to the UCCIRB on completion of the research. The UCCIRB may observe or cause to be observed procedures and records of the research during and after implementation.

You are also required to report all serious adverse events related to this study to the UCCIRB within seven days verbally and fourteen days in writing.

Always quote the protocol identification number in all future correspondence with us in relation to this protocol.

Yours faithfully,

Samuel Asiedu Owusu, PhD

**UCCIRB** Administrator

ADMINISTRATOR
ISTITUTIONAL REVIEW BOARD
UNIVERSITY OF CAPE COAST