# TACKLING THE EXPLORATION OF FOOTBALL PLAYER DISC PROFILES

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### ABSTRACT

# Kerren L. Kollock: Tackling the Exploration of Football Player DiSC Profiles (Under the direction of Erianne Weight)

The purpose of this particular study was to examine the DiSC styles of intercollegiate football players. This study observed the DiSC assessment results of 127 collegiate football players, categorized into Dominance (D), influence (i), Steadiness (S), and Conscientiousness (C). There were 127 points of data used to analyze DiSC style based on the eight different positions as well as offense compared to defense. After completing chi-square analyses, there were two outputs that were significantly different from the sample mean. Most notably, it was shown that the Dominance based quarterbacks were significant. While no significance was found between offensive and defensive units. Overall, this study adds to the literature demonstrating the vast heterogeneity of members of a football team.

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#### **CHAPTER ONE: INTRODUCTION**

### Introduction

For many years, researchers have attempted to understand the differences among people, by creating assessments in order to categorize these variances. These assessments, such as the Myers Brigs Type Indicator have shown to be effective tools in the workplace, with relevance related to training, team building, and decision making (Coe, 1992). Many studies have looked at these assessments and have found correlations in relation to higher work performance, greater levels of communication, or even how to create optimal teams (Bullock, 2019; Macht & Nembhard, 2015). These assessments have been used for research outside of the workplace as well, as many studies have been done in application to college students, and athletes at many different levels (Drucker, 2005; Booth, 2013). Research has even shown differences between team-sport-oriented athletes and individual-oriented athletes within the world of sports (Nia & Besharat, 2010). Additionally, there have been a few studies completed related to athletes in different positions, compared to their results from assessments such as the MBTI and Big Five. (Kirkcaldy, 1982; Schurr et al., 1984).

One Division I university in the southeastern part of the United States has been using the DiSC assessment with student-athletes, coaches, and staff for over eight years. Similar to other assessments, after a series of questions, an individual is placed into a primary style (D, I, S, or C). In addition to simply taking the assessment, the university also provides learning and training sessions for those student-athletes, coaches, and staff in order to better understand the

importance of their results. Because the DiSC has not been as widely utilized as other popular assessments, there are some gaps in the research surrounding this tool.

### **Statement of Purpose**

The purpose of this study is to examine the DiSC styles of intercollegiate football players.

### **Significance of Study**

Coaches have been found to be very impactful sources of personal growth and life skills for athletes, so it is important for them to create strong relationships (Tomlinson & Yorganci, 1997). As the International Council for Coaching Excellence has shown, building relationships is one of the most important skills for a successful coach, as the effectiveness of a coach is found to be more than just the outcome of the games and competitions within the sport (International Council for Coaching Excellence, 2013; Prophet, Singer, Martin & Coulter, 2017). But in order for a coach to provide more than just athletic instruction, they need to understand the athlete's preferences and needs, while maintaining an awareness of their leadership and communication tendencies (Wang, Jin, & Ramsey, 1997). Because every team, no matter the level, includes many individuals who vary depending on personality, physical ability, and social background (Chelladurai, 1984). A coach must have all the necessary tools in their kit in order to connect with all their individual athletes, and truly address the needs of each one's preferences (Thompson, 2014). Because coaches only have a short period of time with these athletes, they need to maintain the strength of the coach-athlete relationship, which can be done by clarifying their communication and adjusting to the needs and tendencies of each individual athlete (McNamara, 1980).

The importance of communication and strong individual connections in the coach-athlete relationship is the impetus for this study. Although research has been completed surrounding

football players and other assessments, there haven't been any studies done relating the DiSC assessment and styles to specific positions within football (Greenwood, 1983). We see this as a current gap in literature because it can potentially help to strengthen the coach-athlete relationship and overall experience. By understanding the DiSC styles of players within positions on a football team, after some training coaches should be able to understand how to adjust their communication styles with individuals in those positions, in order to optimize the message being delivered.

## **Research Questions**

RQ1: Are there significant differences in DiSC styles by football player position based on the following groupings:

Independent positions: quarterback, wide receiver & tight end, running back, offensive line, kicker, defensive tackle & defensive end, linebacker, cornerback & safety.

RQ2: Are there significant differences between offense and defensive football players as a unit?

### **CHAPTER TWO: REVIEW OF LITERATURE**

### **Assessment Tools**

By nature, human beings are both incredibly different, yet rather like each other in many ways. For years, psychologists have developed assessments to attempt to profile, define, and categorize humans so we can build an understanding of who we are, and how we vary. One of the most popular ways of doing this, has been through personality, leadership, or strength-related assessments. Merriam-Webster defines *personality* as "the complex set of distinctive characteristics that distinguishes an individual" (Merriam-Webster, n.d.). Research shows that personality is influenced by both biological and environmental factors and are relatively constant from a very young age (Gorlow, 1957). Within this section, we will examine the most common assessment tools and breakdowns, before we further dive into the DiSC tool used for our research.

### **Myers-Briggs Type Indicator (MBTI)**

One of the most widely recognized assessments is the Myers-Briggs Type Indicator (MBTI). This full assessment includes a set of 96 questions, used to categorize an individual into one of 16 personality types. The 16 different personality types are derived from the results of four dimensions, which are made up of two extremes. A person falls into one of the four extremes: Extroversion/Introversion (how energy is gained), Sensing/Intuition (how information is processed), Thinking/Feeling (how decisions are made), and Judgment/Perception (how to

interface and organize the outside world)—and the individual is then given a code describing their type, for example, ISTJ (Hanson, 2014).

Without a doubt, the MBTI can be a positive tool for training, team building, decision making, and more in the workplace (Coe, 1992). Companies now have the tools and resources to use the MBTI as a way to help members of an organization develop and promote the appreciation of differences throughout the organization (Riceout & Richardson, 1989). The MBTI's validity has been sustained across different barriers, such as location and country (Panait, Cristian & Bucinschi, 2018). It is important to note that various cultures might differ in how they view or expect various personality types. It has been shown that managers across multiple countries do demonstrate strong correlations to personality preferences, but those specific preferences differ based on the actual country (Furnham, Adrian & Stringfield, 1993). In the world of business and the workplace, some career paths might have stronger correlations with specific MBTI preferences, such as counselors tending to be I's and S's (Passmore, Holloway & Rawle-Cope, 2010). Before young adults even reach the workforce, the MBTI can be used to determine potential differences among individuals and academic success. For example, Ayoubi and Ustwani (2014) found that INTJ and ENFJ students achieved higher GPA marks, and even more specifically, those leaning toward N tended to have higher grades than S's (Ayoubi & Ustwani, 2014). Accordingly, MBTI might help indicate what specific area of study a young adult should pursue. As Kim and Han (2012) showed, nursing students were most commonly ESFJ and ESTJ, and that satisfaction among students was much higher for E's than it was for I's (Kim & Han, 2012). We will discuss studies which have utilized MBTI in the athletics industry as a foundation for the current research within the assessments and sport section.

### **Big Five**

One of the other most well-known personality categorizations is referred to as the "Big Five". There are many tools created which pose a series of questions to derive where on a scale people fall within five recognized dimensions. Most commonly, the five dimensions in this classification are: Openness (imagination and insight), Conscientiousness (thoughtful and detail oriented), Extroversion (how energy is gained), Agreeableness (cooperation and care), and Neuroticism (stability and emotional resiliency) (Costa & McCrae, 1995).

The Big Five can be used in relation to job performance, as conscientiousness is found to be the strongest predictor of job performance across various cultures (Van Arde, Meiring & Wiernik, 2017). Conscientiousness is not only a strong predictor of individual performance, but it is also shown as a positive predictor of team-level performance in the workplace, as multiple studies have looked at how to blend personalities to create optimal teams (Bullock, 2019; O'Neill & Allen, 2011). Studies have looked at communication as an indicator of higher performance, as it has been found that the higher scores of the Big five extraversion and openness are associated with greater levels of communication, leading to a higher potential of team performance (Macht & Nembhard, 2015). Similar to levels of communication, the Big Five has been used in studies related to comfort with social settings, as extraversion and agreeableness lead to a more positive experience in social settings (Wilt & Revelle, 2019). The Big Five has been used to discover and prevent negative behaviors such as workplace deviance, cyberbullying, and in-person workplace bullying (Balakrishnan et al., 2019; Pletzer et al., 2019; Wilson & Nagy, 2017). Both inside and outside of the workplace, research has shown that conscientiousness, openness, agreeableness, and extraversion are all related to positive passion,

which could potentially be related to the passion of student-athletes both on and off the field (Dalpé, Demers, Verne-Filion & Vallerand, 2019).

#### CliftonStrengths

One of the newer assessments is the CliftonStrengths, formerly Clifton Strengths Finder through Gallup. This very in-depth 1-hour assessment asks users to choose between paired statements that best describe them over 177 questions. This assessment is used to measure talents and natural patterns of thinking, feeling, and behaving (Rath, 2007). At the end of the assessment, the results are categorized into the 34 CliftonStrengths themes, which can then be broken down into four domains (Rath, 2007). A Signature Theme report is created for each user, which expresses a deeper explanation of that individual's top five most dominant themes.

Although CliftonStrengths is newer and more time consuming than Myers-Briggs and Big Five association, a lot of research has been completed surrounding the assessment. In 2018, Busch and Davis utilized the CliftonStrengths to help undergrad and graduate students develop self-awareness and understand their personal brands, specifically to prepare for the workplace. Drucker (2005) notes that true self-awareness is the foundation for creating a personal brand, so this research looked to use the CliftonStrengths to discover their greatest strengths and attributes (Drucker, 2005). After completing the CliftonStrengths, participants in Busch and Davis' 2018 study found that students became more self-aware, and as such, 100% of graduate students and 83% of undergraduate students recommended using the assessment (Busch & Daivs, 2018).

These tools are presented in order to help the reader understand a variety of assessments and tools that have been used in previous research. Understanding the basic concepts of these most popular assessments is crucial to understanding the next section regarding assessments and

athletics. At this point, the aforementioned assessment tools have been much more commonly used than the DiSC assessment, although they are not specifically the same tool. It's important to see the research that has been done in relation to these tools, in order to better understand the potential for research around DiSC and athletics.

### **Assessments and Sports**

Since the early 1900's, many researches have been intrigued about the differences between elite athletes and non-athletes (Carter & Shannon, 1940; Chalfin, P., Weight, E., Osborne, B., Johnson, S., 2015; Shulman & Bowen, 2001). Researchers have examined the differences of personality traits among athletes and non-athletes at both the collegiate and professional level of sports, because studies have shown that these trait tendencies strengthen as the competitive level increases (Booth, 2013). Research has also shown significant differences in personality traits between competitive athletes, and individuals who don't participate in sports (Chalfin et al., 2015; Booth, 2013). As time progressed from the 1940's, more and more studies have centered around personality and the world of athletes. At the prime of introducing women's basketball in the 1980's, researchers found that women's basketball players were significantly more tough-minded than those women who did not participate in sports. In addition to being more tough-minded, it has been shown that athletes score higher in categories related to leadership and sociability compared to non-athletes (Evans & Quarterman, 1983). These findings seem intuitive, as athletes often face high-pressure situations in their sport where they have the need to be outgoing leaders among their peers, and the success of their team depends on their ability to communicate and be social with each other (Carter & Shannon, 1940).

Given that there is research indicating athletes' tendencies and preferences can differ from non-athletes, it provides a literary foundation to further explore the population of athletes to

examine additional potential differences within the athletes themselves. Unfortunately, there has been limited research related to personality and specific sports, but from the studies that have been conducted, there seems to be unique intra-sport variances worth examining further. In a study of American football players (Greenwood, 1983), it was found that offensive players tend to have a greater sense of anxiety control compared to defensive players (Greenwood, 1983).

In teams where positions can be broken down into attacker, defensive, and midfield positions, Kirkcaldy (1982) found attackers tend to have a higher rating in both extraversion and psychoticism (e.g., tough minded, dominant) compared to midfielders. His work also shows that attackers were less emotionally stable in comparison to defensive players (Kirkcaldy, 1982). Although this work is relevant to different sports, a lot of research has also been done revolving around positions in American football, as there are a variety of positions. It's been found that both offensive and defensive "backs" have greater skills in relation to concentration and confidence, compared to the offensive and defensive "linemen" (Cox & Yoo, 1995). Further, the backs tend to be Js (Judging) on the MBTI category of structure, whereas the linemen tend to be Ps (Perceiving) (Schurr et al., 1984). It might be worthy to note that if we look too far at the micro level within positions, we won't find much statistical significance, as shown in Greenwood's study. While comparing "central" and "non-central" defensive positions within a baseball team, the only result showed that non-central players had a significantly higher sense of responsibility compared to those in central positions (Greenwood, 1983).

It's note-worthy to propose that trait differences between positions in a sport might not always be self-identifiable, but rather observed tendencies by those within the group. One 2012 study suggests that personality traits may be in the eye of the beholder, which can be seen and understood from an intergroup perspective. When asked to rate their teammates, hockey players

came up with many uniform descriptions for tendencies across their positions. For example, forwards are thought to be more extraverted, while defensemen are the most emotionally stable (as shown by Kirkcaldy), and goalies were found to be more conscientious (Cameron, Cameron, Dithurbide & Lalonde, 2012). These types of peer-identified tendencies and characteristics might help researchers to shape their questions and hypothesis regarding self-identified personalities of athletes.

This type of work done by Cameron et al. (2012) informed Kim's work of looking at informal roles within a team (Kim et al., 2018). As with any group or team, informal roles and inclinations are expected to emerge in response to the group's formal structure, which is why Kim found many results by asking teammates to peer-report about 10 different informal roles and identities within their teams. For example, "team comedians" are more extraverted; "team mentors" are more emotionally stable; and "non-verbal leaders" are less extraverted yet more agreeable (Kim et al., 2018). It's worthwhile to note that most of the population (70%) of athletes tend to be extraverted (Schurr, Nisbet & Wallace, 1984).

Once it is determined that personality traits can differ between positions on a team, it's logical that researchers would want to know which of those specific characteristics and tendencies lead to success in the actual sport. If one can predict which traits enable athletes to perform better, they would then focus on improving those qualities, and ensure the team is composed of the most ideal collection of athletes as possible. From a macro level, we have learned that female basketball players are more successful when they are slightly less trusting, especially if they have their guard up in a very fast-paced sport where things could change at any second (Evans & Quarterman, 1983). Taking this personality-success idea a step further, Garland and Barry found that the general signs of group-dependence, tough-mindedness, emotional

stability, and extraversion were all significantly related to performance on the field. Although this study related specifically to collegiate football, it's hypothesized that those four traits could be a prediction of greater performance in many sports (Garland & Barry, 1990). Research has also led to us pin-pointing the exact Myers-Briggs combination (Extraversion-Sensing-Thinking) that leads to success, as Schurr et al. (1984) showed that the combination of Extraversion-Sensing-Thinking led to successful linemen in American football, 86% of the time (Schurr et al., 1984). If that exact combination isn't achievable, rest assured if a team has some Thinkingtended players, as they were 2.04 times more likely to be successful than a Feeler in Schurr's study (Schurr et al., 1984).

Just as different jobs might attract different varieties of individuals, there's the idea that people with various tendencies might prefer a team-sport or an individual-sport. Nia and Besharat (2010) showed that individual-sport athletes are significantly higher in the realm of autonomy and conscientiousness, as they need to be able to make decisions and perform without teammates nearby (Nia & Besharat, 2010). They also found that team-sport athletes tended to score higher in relation to agreeableness and sociotropy, which is evident in their ability to constantly communicate and come to decisions with their teammates (Nia & Besharat, 2010). Although it was shown earlier that extraversion tends to be common in athletes, it was found that a smaller percentage of those in an individual competition (56%) leaned toward extraversion compared to other studies surrounding team-sports (Clitsome, Teresa & Kostrubala). Lakie (1962) has also shown that individual-sport athletes scored higher on the "social maturity" trait compared to other sports, as they tended to be more independent and less compulsive than teamsport athletes (Lakie, 1962). It was also reported that team-sport athletes were more likely to

score higher on the "liberalism" trait, as they are more flexible and willing to assume risks compared to individual-sport athletes (Lakie, 1962).

While this section is to serve as a review of the literature surrounding personality assessments in sport, it's important to note that a lot of work is still left to be done. Recently in 2013, Allen, Greenlees and Jones (2013) completed a full comprehensive review of personality and sport research. Although they found a lot of progress has been made in relation to personality and sport, they believe that a lot of work is still needed, and there are many gaps to be filled (Allen, Greenlees & Jones, 2013). Among these many gaps is the suggestion for researchers to explore personality differences in relation to issues outside of just competition and focus on the athletes to consider the role of personality in social interactions and group processes. Although this study will not specifically focus on personality traits, but rather DiSC styles, it will still be a step in the right direction to fill these gaps and shed light for future coaches, administrators, and athletes to understand and accommodate different communication preferences.

#### **DiSC Tool**

The DiSC model of behavior was originally created by William Moulton in 1928. His book, *Emotions of Normal People*, described the general differences in behavior among people and how individuals' behavior may change over time, or be flexible with practice (Marston, 1928). The objective of Moulton's work was to help people understand in simple and practical ways, how to manage their experiences, relationships, and reactions. Moulton was the first to categorize these behavior tendencies into the four categories of D, I, S, and C. After this groundwork was set, Walter Clarke created an assessment instrument to match Moulton's

concepts. Based on the pre-established model, Clarke created a checklist of adjectives in which people identified the descriptors relevant to themselves (Walter, 1956). This process began being utilized in 1956 as a way to assist in business personnel selection. About ten years after the initial release, Walter Clarke Associates slightly modified the assessment tool, and switched from using a simple checklist, to a system of presenting two choices, forcing the respondents to make a decision between the two factors. In the 1970s, John Geier adapted this system to create the DiSC assessment to be published by Inscape Publishing (Geier Learning International). Over the years, the scale has been modified in order to continue to improve the reliability of this tool. As of 2013, the DiSC assessment tool is at the peak of its reliability, optimizing the ability to provide a detailed report after someone completes the typical 79-item assessment.

Once a participant completes the assessment, scores are tallied electronically. The reports are then available for review and are often encouraged to be shared and discussed by a DiSC facilitator in a group setting. This report allows the individual to read about their unique behavioral style, their tendencies, needs, preferred environment, and strategies for effective behaviors and communication (DiSC Profile). This allows people to learn about their strengths and weaknesses, and recognize where there might be blind spots. The report also contains information about the other styles, in addition to that of the participant, so the information can be used for comparison, and to better understand coworkers, and teammates. By understanding the other styles, participants can be better equipped to adapt their own DiSC profile, an individual can begin to recognize potential obstacles in their own lives, and ways to continue to develop and interact with others (Ritchey & Axelrod, 2002). The DiSC assessment itself measures an individual's tendencies, preferences, and patterns of behavior in various situations. By having a

better grasp of their own style, and those of the people around them, participants have the ability to learn to adapt their own responses depending on the person and situation they're facing (DiSC and Teambuilding). Findings have suggested that using the DiSC as a tool in the workplace has increased communication effectiveness, by allowing individuals to understand others' characteristics and traits, specifically related to their team or group (Lykourentzou, Antoniou, Naudet, & Dow, 2016). The use of this DiSC tool has assisted teams in establishing a common language between coworkers, as members continue to understand the preferences and characteristics of their counterparts (Kerr, 2009). Studies have shown that understanding the DiSC profiles of co-workers can lead to improved collaboration results (Lykourentzou, et al., 2016; Stephens, 2017).

The explanation of one's DiSC results can be described in the four categories of: Dominance, influence, Steadiness, and Conscientiousness (Marble, 1997). Note the use a lowercase i for influence, as over time companies could not truly trademark "DISC", and the lowercase i is the way to separate the current assessment tool from other assessments. It's important to mention that no one style is considered superior or better to the others, and in fact it's been shown that a balance of styles among work teams leads to lower levels of conflict, and higher levels of satisfaction and performance on collaborative tasks (Lykourentzou, et al., 2016). In order to better understand the tendencies and preferences of those in each category, a brief summary is provided below. The below explanations of the four DiSC styles have been pulled from the DiSC profile overview webpage (DiSC Profile).

### Dominance

These individuals place emphasis on accomplishing results, the bottom line, and confidence. A person with a D style:

- Is motivated by winning, competition and success.
- Prioritizes accepting challenges, taking action, and achieving immediate results.
- Is described as direct, demanding, forceful, strong willed, driven, determined, fast-paced, and self-confident.
- May be limited by lack of concern for others, impatience, and open skepticism.
- Values competency, action, concrete results, personal freedom, and challenges.

# influence

These individuals place emphasis on influencing or persuading others, openness, and relationships.

A person with an i style:

- Is described as convincing, magnetic, enthusiastic, warm, trusting, and optimistic.
- Prioritizes taking action, collaboration, and expressing enthusiasm.
- Is motivated by social recognition, group activities, and relationships.
- Values coaching and counseling, freedom of expression and democratic relationships.
- May be limited by being impulsive and disorganized and having lack of follow-through.

### Steadiness

These individuals place emphasis on cooperation, sincerity, and dependability.

A person with an S style:

- Is motivated by cooperation, opportunities to help, and sincere appreciation.
- Prioritizes giving support, collaborating, and maintaining stability.
- Is described as calm, patient, predictable, deliberate, stable, and consistent.

- May be limited by being indecisive, overly accommodating, and a tendency to avoid change.
- Values loyalty, helping others, and security.

### **Conscientiousness**

These individuals place emphasis on quality, accuracy, and competency.

A person with a C style:

- Is motivated by opportunities to gain knowledge, show their expertise, and produce quality work.
- Prioritizes ensuring accuracy, maintaining stability, and challenging assumptions.
- Is described as careful, cautious, systematic, diplomatic, accurate, and tactful.
- May be limited by being overcritical, overanalyzing, and isolating themselves.
- Values quality and accuracy.

The current version of the DiSC assessment provides a visual representation of an individual's profile. It breaks the four primary styles down into quadrants of a circle, and the individual will have a dot where they fall on the circle. This dot could land in a large variety of locations, which correlates with information for the participant. If it lands for example in the S section, but near the line with the C section, that means the individual has rather strong tendencies of both categories. If the dot is toward the outside of the circle, the individual may need to put forth more effort in order to adapt and make adjustments, compared to someone with a dot that is closer toward the center.

The report created for individuals provides the tools to comprehend their personal style, know what motivates and causes stress for them, understand how they react to the other styles, have strategies to increase their effectiveness with each style, and an overall summary for increasing effectiveness (Using DiSC Classic). Groups that participate in the DiSC assessment ultimately facilitate a common language through which organizational stakeholders are able to not only have a better understanding of themselves, but also how to interact with everyone else on their teams and work groups on a daily basis. Participants who have completed the DiSC and have received training note how important it is to learn how to best communicate with team members, and understand how their own preferences might impact their ability to be adaptive to change (Hunt, 2019). Not only has DiSC been shown to be relevant in the workplace (Bryant-Robinson, 2016), but research has shown a relation between certain DiSC styles and levels of adaptation and collaboration within a college course setting (Chahino, 2011).

The creation and validation of psychological assessments can prove to be difficult, mainly because these assessments are measuring abstract qualities that can't actually be seen or touched. With that being said, it's very important to look at the stability of a tool, to observe if the results are similar over time. With tools such as the DiSC, it's nearly impossible to have a perfect testretest, even if an individual's tendencies and qualities don't change. This is largely in relation to the time between the multiple tests. Research has demonstrated an individual's overall profile generally stays similar over the years once they reach adulthood (Everything DiSC Research Report, 2013). For student-athletes dealing with exposure to many new experiences, stressors, and people, there's the chance that they might experience slight shifts throughout college. Many factors can affect how someone answers a question, such as mood, location, or sleep levels. Therefore, in order to have the most accurate testing for stability, it's best to test and re-test within a short period of time. In order to demonstrate the reliability of the DiSC, the Wiley Brand measured the stability based in the form of a reliability coefficient. The coefficients range

between 0 and 1, with .7 being considered acceptable, and anything above .8 considered very good. To do so, 599 participants took the DiSC assessment twice, over a two-week period (Everything DiSC Research Report, 2013). The results for the DiSC styles ranged from .85 to .88, all which are well over the .8 scale, representing very good stability. Therefore, the DiSC assessment should be viewed as a highly reliable tool, which is why we can easily justify continuing to use it for assessment (Everything DiSC Research Report, 2013).

Research has provided a solid foundation of DiSC reliability and validity, especially in relation to the workplace. However, there are gaps in our knowledge related to DiSC styles across positions within sports. Therefore, we pursue this research to make strides surrounding DiSC styles for collegiate football players in order to bring more research to the world of athletics.

#### **Importance of Coach-Athlete Relationship**

Coaching effectiveness and success are found to be more than just win-loss records (Prophet, Singer, Martin, & Coulter, 2017). In fact, one of the six functional coaching competencies as outlined by International Council for Coaching Excellence (2013), is "building relationships". With this being said, it's crucial to look at the coach-athlete relationship as the foundation of coaching, which enables these leaders to address the basic psychological needs of players, while teaching the sport, and bringing together the whole team as a cohesive unit (Newman, Kim, & Alvarez, 2018). The coach-athlete relationship is defined as a situation in which coaches' and athletes' emotions, thoughts, and behaviors are mutually interconnected (Jowett & Wylleman, 2006). When the coach-athlete relationship first begins, the coach is accepting an immense responsibility for the overall development of that individual player (Dick,

1989). The coach immediately becomes such an important mentor in the lives of many very impressionable student-athletes (Potts, 2002). Especially in college, the coach is responsible for molding and motivating these young players during a time of great change, when these young adults are at a highly sensitive point in their lives (Potts, 2002). It's important for coaches to nurture strong relationships, because they have been found to be important non-parent sources of influence, with the ability to strongly impact personal growth and teach life skills (Tomlinson & Yorganci, 1997). Once a coach takes the time and effort to develop these strong relationships with the individual players, it is easier to create a positive team dynamic and cohesion among the group in order to work toward success in the particular sport (Wang, Jin, & Ramsey, 1997).

Because a coach serves the role of mentor, teacher, and organizer, they have a large power advantage, and need to be sure to act correctly as they have a power over the athlete's sense of safety, trust, and fulfillment of needs (Davis and Jowett, 2014). This is particularly important for relationships between male coaches and female athletes, as the power dynamics in these relationships are heightened even further (Tomlinson & Yorganci, 1997). If the relationship isn't strong, the athlete can experience great frustration, and their perception of their skills, competence, and guidance can rapidly drop (Felton & Jowett, 2014). When athletes feel that their coach demonstrates empathetic attention and individual understanding, they are more motivated to trust that leader, which can ultimately lead to success (Camiré, Turgeon, Stephanie, & Kendellen, 2019). In order to reach the optimal level of leadership and coaching effectiveness, a coach must have a high level of awareness for the athlete's needs, emotions, and preferences, but also a self-awareness of their own leadership and communication tendencies (Wang et al., 1997).

It has been shown that taking a servant-leader approach in a coach position can have a very positive impact on individual motivation and team cohesion (Kim, Kim, & Won, 2018). People with servant-leadership tendencies often show empowerment to individuals, as they appreciate and encourage personal development, which is specific to each unique individual (Kim, et al., 2018). As Zhang, 2004 showed, the athlete's commitment to a coach can be described through three facets: 1) level of acceptance of a coach's principles, 2) the willingness to support their coach, and 3) valuing the relationship with the coach (Zhang, 2004). These facets can be heightened when a coach takes a servant-leadership approach, by showing commitment to the growth and success of each player on an individual level (Kim, et al., 2018).

In addition to helping with life skills and success in the sport, a coach is also an incredibly important member of the athlete's social environment, with a great potential impact on the psychological health of each athlete (Jowett, 2009). Part of this is the ability for a coach to have a large potential impact on an athlete's perceptions of engagement and burnout, which not only can impact the athlete's physical performance, but their mental stability (McGee & DeFreese, 2019). The coach-athlete relationship (when partnered with a strong team network) was found by to be one of the most profound protective factors against mental health symptoms for an athlete (Armstrong and Oomen-Early, 2009).

### **Individual Preferences**

When a student is being recruited to play a sport, they often feel they are being sought after for their skills, abilities, and assets as an *individual*. However, they're often being looked at as a moving piece of the overall team puzzle. No matter the amount of people, whether it's a small tennis team, or a large football squad, there are going to be differences between every player. Every team includes many individuals who differ in a variety of ways including

personality, ethnicity, physical ability, and social background (Chelladurai, 1984). A coach's task is to somehow find a way to blend different individuals together into one cohesive unit and develop the best human relation skills to understand the needs and preferences of their players, and then be successful as a whole unit (Chelladurai, 1984). In order to foster the best possible coach-athlete relationships, coaches must gain a deep understanding of each individual athlete, and how that person is potentially similar, yet very different, to everyone else on the team (Kluckhohn & Murray, 1953). It isn't until the coach grasps this ability that an athlete will have a strong rapport with that coach, as they feel the coach sees them as a unique person and is sensitive to them as an individual (McNamara, 1980). The coach-athlete relationship can be looked at very similarly to a student-teacher relationship. Just like being a student in the classroom, student-athletes display different individual learning preferences that influence their ability to learn techniques and plays (Thompson, 2014). Although it is not always possible to have individual time with athletes, it's important to note Fleming's work, showing that individuals should be taught and addressed in ways that complement their natural preferences and learning tendencies in order to achieve the highest success in understanding (Fleming & Baum, 2006). For a coach to successfully reach all of their athletes, it's important for them to have all of the tools in their kit to address the needs of each individual preference (Thompson, 2014).

#### Communication

As shown by Miller, et al. (1988), active listening skills are the most powerful techniques used to build relationships between individuals at any level. If a coach is attempting to create a better communication channel with their athlete, it's important for them to clarify the message whenever needed, to ensure they are perceiving the information the same way the athlete is

attempting to explain it (McNamara, 1980). In athletics, communication breakdowns can occur often, especially if there is a misunderstanding of what someone is trying to say, which can be avoided if the coach takes the time to understand the individual athlete's preferences and tendencies (McNamara, 1980). Additionally, by having effective communication skills and understanding everyone's preferences, a coach will have a better chance of melding together those differences to achieve a common goal (Anshel, 1997). By taking the time to become aware of each athlete's feelings, preferences, and tendencies, the coach's communication can be much more effective, as long as they understand that appropriate communication for certain people might not be appropriate communication for everyone (Wang et al., 1997) It's important to recognize that a collegiate coach only has a short period of guaranteed time with these young adults, and if they lack the ability to effectively communicate, the coach-athlete relationship could easily fall apart, which could hinder the entire team's success (McNamara, 1980).

### **CCC's of Relationships**

As already explained, the coach-athlete relationship is a situation where the interpersonal feelings, thoughts, and behaviors are interdependent on both the coach and the athlete involved, which is looked at as a dynamic state (Jowett, Yang, & Lorimer, 2012). Jowett (2006) is one of the leading researchers in the world of the coach-athlete relationship, and has instilled the idea that closeness, commitment, complementarity are the key elements of relationship quality within this coach-athlete relationship (Jowett & Wylleman, 2006). Closeness relates to the feelings of mutual trust, care, respect, and appreciation between the coach and athlete. When closeness is heightened, both the coach and athlete feel cared for, liked, valued, and trusted (Phillips, 2017). Closeness between a coach and athlete is such a crucial factor for engagement, that closeness is a statistically significant predictor of seasonal burnout across an athletic season (McGee &

DeFreese, 2019). Commitment is the intention or dedication to maintain the highly interdependent relationship over time, which often can span years after the athletic coach-athlete relationship ends (Jowett et al., 2012). Complementarity then refers to the corresponding and co-operative behaviors such as readiness, easiness, and responsiveness to each other (Jowett et al., 2012). When complementarity is heightened, the coach and athlete accept and respect each other's roles and responsibilities (Phillips, 2017). It is highly believed that when an athlete feels their relationship with their coach is underlined by trust, respect, and co-operation that they are more likely to be satisfied with their training because they feel their coach is more attune with, sensitive to, and knowledgeable of their individual needs (Jowett et al., 2012). This cohesion of closeness, commitment, and complementarity can lead to not only greater athletic success, but can also create an environment where the athlete is willing to learn teamwork, goal setting, social skills, leadership, and problem solving from their coach (Camiré et al., 2019).

### **Big Five and the Coach-Athlete Relationship**

In our world today, every relationship is made up of two personalities, and both partners' personality traits jointly and uniquely shape the quality of their relationships (Robins, Caspi, & Moffitt, 2000). This can be held true both in and outside the world of athletics. As we know, each person's personality traits are different and tend to contribute independently to their perceived relationship quality (Copper, 2002). However, it has been shown that similarities in these traits can provide a buffer against relationship distress by reducing conflict and facilitating effective communication (Barelds & Barelds-Dijkstra, 2007). These potential links between people's personality and preferences have been used as a platform from which interpersonal behaviors and interactions successfully occur and unfold (Copper, 2002). Specifically, in relation to the popular Big Five theory, high levels of similarity have been associated with enhanced

relationship satisfaction (Luo & Klohnen, 2005). Even if a coach and athlete aren't completely similar in their tendencies, preferences, and personality styles, much research has shown that various levels of the Big Five traits can predict relationship ease and satisfaction (Hulyaasci, Kelecek, & Altintas, 2015). Multiple studies have found a strong positive correlation when high levels of agreeableness were present, as athletes are more committed to the strength of their relationship when their coach was also highly agreeable (Jackson & Beauchamp, 2010). This heightened sense of agreeableness is directly tied to less relationship distress as well as to a more supportive, satisfying, and non-conflictual relationship atmosphere (Cuperman & Ickes, 2009). Similarly, a strong effect has been shown for conscientiousness in relation to the relationship commitment: every one-point increase in an individual's conscientiousness was directly associated with a .34 increase in that person's commitment to the relationship (Jackson, Dimmock, Gucciardi, & Grove, 2011). Cuperman & Ickes (2009) also showed that higher levels of openness led to adaptive, close, empathetic, and an overall more positive perception of the relationship. As we've previously discussed, extraversion tends to run high in athletes, which is also a strong predicter of relationship commitment and satisfaction for coaches and athletes (Jackson et al., 2011). Extraversion leads to positive interpersonal experiences and effective conflict resolution, with athletes viewing their relationships as positive, supportive, and trusting (Hulyaasci et al., 2015). In contrast to the other four factors, high levels of the factor neuroticism are associated with a negative perception of the coach-athlete relationship (Pierce, Sarason, Sarason, Solky-Butzel, & Nagle, 1997). When one of the two individuals show high levels of neuroticism, the relationship tends to be conflictual, dissatisfying, and stressful for both the coach and athlete (Karney & Bradbury, 1995). Understanding and adapting to these findings can

relate to both the athletic success and the success of the interpersonal relationships between the coach and athlete (Allen & Laborde, 2014).

### **CHAPTER THREE: METHODOLOGY**

#### Instrument

In order to test the DiSC styles of football players, we utilized the Everything DiSC Workplace and DiSC Classic by Wiley, as previously described (DiSC Profile). This typical 79question assessment, is completed by participants complete online via a computer or cell phone. Once the DiSC assessment is completed, the participant information is scored and the program provides an interpretation to the participant with their preferences falling within one of the four primary behavioral styles (Dominance, Influence, Steadiness, Conscientiousness). Although participants are able to fall into a secondary style, only their given primary styles were utilized for the purpose of this study.

### **Participants**

A convenience sampling methodology was utilized for the study. Participants included football players from the time span of 2011-2020 participating at a large public institution whose athletes participate in NCAA the Division I Football Bowl Subdivision . All football players in this study are males. From the years 2011-2020, there were 421 different individuals on the football team rosters. Of this total, there were 127 who completed the DiSC assessment. Therefore, this study will encompass almost 30% of the institution's football player population. Because this study is completed only with football players from a single institution, this data may not be generalizable for college football players on a whole. The football players within this institution may have been recruited by different coaching staffs, which could potentially cause

some fluctuation in what each coach was looking for in different positions. As participation in DiSC was optional over the years, it is possible those who chose to participate have a stronger tendency for leadership, which could create a difference in DiSC styles.

### Collection

The data for the nine years of collection has been stored in the online Wiley EPIC Administrator website. In this website it is possible to search for DiSC results based on name, date, or previously created sub-folder. Each of the 421 individuals from the rosters in the designated years were manually searched for in the Wiley EPIC Administrator database to determine if any of those individuals completed the assessment.

### **Grouping of Positions**

Although there are many positions found within a football team, for the purpose of this research, we examined nine different positions/groupings to determine any potential tendencies related to DiSC styles. We also collectively grouped by offensive and defensive positions, but not special teams as a whole (Kickers are included). The groupings utilized within analyses are detailed below.

### Offense

Quarterback: This is often looked to as the leader of the offense within Football, as they are the individual who is responsible for reading the field and passing or handing off the ball to make plays (KRT News Graphics, 2009).

Wide Receiver and Tight End: Although these two positions are not identical, they are very similar in duties on the football field. A Wide Receiver's primary job is catching the ball, with a

small portion of blocking when needed. Whereas the Tight End's job is approximately half blocking, and half catching the ball, depending on the individual player (Hall, 2019).

Running Back (Fullback, Tailback, Halfback): Depending on where the Running Back lines up, they can be referred to as a handful of names. However, the overall purpose of this individual is to run the ball, and occasionally assist in blocking (Hall, 2019).

Offensive Line (Center, Guards, and Tackles): These positions are all similar, just dependent on where they line up. Their primary role is to block the defensive players (Hall, 2019).

Kicker: This individual is responsible for kicking field goals and extra point attempts (KRT News Graphics, 2009).

### Defense

Defensive Tackle and Defensive End: These two positions are generally the same, just depending on where the individual is lining up. They are responsible for stopping the run game, and occasionally rushing the Quarter Back (Hall, 2019).

Linebacker: Similar to the Quarter Back on offense, this position is often looked to as a leader of the defense, as they are responsible for seeing the entire field, and communicating to their teammates, while stopping both the run and the pass (Hall, 2019).

Cornerback and Safety: Although not completely identical positions, these two have the responsibility of stopping the pass game. The Cornerback is usually assigned a specific individual to stay with, whereas the Safety has a little bit more freedom to make decisions as to where to go based on the offense's play (KRT News Graphics, 2009).

### **Data Analysis**

The DiSC profiles and athlete positions were organized in an excel spreadsheet. The list in the spreadsheet contained the position, and primary DiSC style for each individual. From there, the data was sorted based on position. Chi-Square analyses were utilized to assess whether there were significant differences between DiSC styles (dependent variable), and football position (independent variable as described above) utilizing SPSS statistical software. The data was inputted based on position (coded as 1-8) and DiSC style (coded as 1-4). Once entered into SPSS, a 4x8 chi-square analysis was run to address research question one. Then a 4x2 chi-square analysis was run to address research question two. In order to add a visualization of the spread of the data, dots have been *approximately* placed over the DiSC circles as shown in the figures found in the results section.

## **CHAPTER FOUR: RESULTS**

There were 127 data points used to analyze DiSC style based on the eight different positions as well as offense compared to defense. After completing chi-square analyses, there were two outputs that were significantly different from the sample means. Analyses by specific research questions are explained below.

# **Research Question 1: Are there significant DiSC style differences based on positions among football players?**

As shown in Table 1, there were varied numbers of respondents based on positions within the overall population. The sample size for each position ranged from eight to 28 based on the number of DiSC assessments completed through the convenience sampling. Overall, the DiSC styles of football players significantly differend by position  $\chi^2(1, N=127) = 29.73$ , p = .097utilizing an alpha of  $\alpha < .10$ . Within post-hoc tests, two positions revealed adjusted standard residuals greater than 1.96 which indicates greater than two standard deviations from the sample mean equivalent to p < .05. Quarterback D's yielded an adjusted residual of 2.4, p > .05. Within this position, six of the eight quarterbacks were had Dominance styles, with one an i and one a C. There was also significance uncovered within the Running Back (S) position, with an adjusted residual of 2.1, p > .05. This emerged because 33% of Running Backs were Sensing based. This is perhaps explained through the notion that not many of the individuals from the overall population were S's, so there was a greater proportion of S's within the running back position than in any other. Because the DiSC assessment is usually explained to participants through a visual dot on the DiSC circle, the *approximate* distribution of dots on the DiSC circles are shown in Figure 1 to demonstrate the overall distribution of DiSC profiles by position. The Offensive Line position was approaching significance, where the adjusted residual was 1.9, p > .05 for both the D and i styles. None of the other positions yielded a prevalence of styles significantly different than an expected distribution through the adjusted residuals, which is why there was not an overall difference in DiSC styles based on positions across football players in this chi-square analysis.

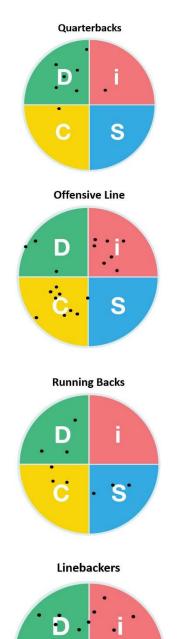
Table #1

		Position							
	К	QB	OL	WR/TE	RB	DT/DE/DL	LB	CB/DB/S	χ2
Deminance (D)	37.50%	75%	15.80%	28.60%	33.30%	41.70%	50%	32%	29.734
Dominance (D)	(0.1)	(2.4)*	(-1.9)	(-0.9)	(-0.1)	(0.5)	(1.4)	(-0.4)	
Influence (i)	12.50%	12.50%	36.80%	17.90%	0%	8.30%	22.20%	28%	
Influence (i)	(-0.6)	(-0.6)	(1.9)	(-0.4)	(-1.6)	(-1.1)	(0.2)	(1)	
Chandinana (C)	12.50%	0%	0%	21.40%	33.30%	0%	5.60%	16%	
Steadiness (S)	(0.1)	(-1.1)	(-1.7)	(1.8)	(2.1)*	(-1.3)	(-0.9)	(0.7)	
Conscientiousness (C)	37.50%	12.50%	47.40%	32.10%	33.30%	50%	22.20%	24%	
	(0.3)	(-1.2)	(1.5)	(0)	(0.1)	(1.4)	(-1)	(-1)	
n	8	8	19	28	9	12	18	25	

N = 127

(Adjusted Standardized Residuals)

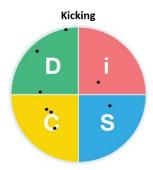
\* p < .05



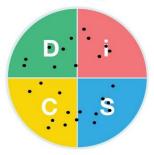
С

S

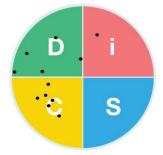
## Figure 1: DiSC dot placements based on football position



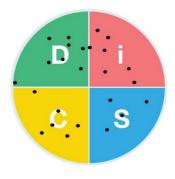
Wide Receivers/Tight Ends



**Defensive Line** 



**Defensive Backs** 



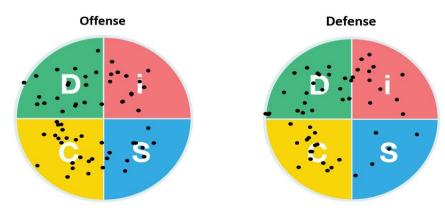
# **Research Question 2: Are there significant DiSC style differences between offensive and defensive football players?**

As shown in Table 2, the Offensive player DiSC styles were compared to the Defensive player DiSC styles. Analysis revealed that the DiSC styles of football players did not differ significantly based on Offensive or Defensive positions,  $\chi^2(1, N = 127) = 1.57$ , p = .66. None of the adjusted residuals for the DiSC styles were approaching significance, as all of the four styles were similarly represented in the overall percentage of Offensive or Defensive data points. Similar to Research Question 1, the *approximate* results of Offensive and Defensive DiSC styles are visualized within the traditional DiSC circles in Figure 2 below.

	Offense	Defense	χ2
			1.571
Dominance (D)	31.90%	40%	
Dominance (D)	(-0.9)	(-0.9)	
Influence (i)	19.40%	21.80%	
Influence (i)	(-0.3)	(-0.3)	
Standinger (S)	13.90%	9%	
Steadiness (S)	(-0.8)	(-0.8)	
Consciontiousnoss (C)	34.70%	29.10%	
Conscientiousness (C)	(-0.7)	(-0.7)	
n	72	55	

(Adjusted Standardized Residuals)

## Figure 2: DiSC dot placements based on offensive and defensive positions



## **CHAPTER FIVE: DISCUSSION**

Many studies have been done over the years in relation to personality and behavioral assessments of college students and athletes at many different levels (e.g. Drucker, 2005; Booth, 2013). As time has gone on, researchers have found interest in these assessments related to athletes, and have even broken the assessment studies down based on positions within teams (Nia & Besharat, 2010; Kirkcaldy, 1982; Schurr et al., 1984). The purpose of this particular study was to examine the DiSC styles of intercollegiate football players and how those styles may differ based on position. Within this research we sought out to answer two different questions. First, are there significant differences based on positions among football players based on eight different groupings: quarterback, wide receiver & tight end, running back, offensive line, kicker, defensive tackle & defensive end, linebacker, and cornerback & safety. Secondly, are there significant differences between offensive and defensive football players. This study is significant because the effectiveness of the coach-athlete relationship is highly dependent on trust and communication (Chelladurai, 1984; McNamara, 1980; Thompson, 2014), and if there are prevalent trends in communication styles and preferences within a team, this information could prove quite useful. This understanding could help to improve the coach-athlete relationship based on awareness and adaption to various DiSC styles among athletes. In order to accomplish this task, this study observed the DiSC assessment results of 127 collegiate football players, categorized into Dominance (D), influence (i), Steadiness (S), and Conscientiousness (C). It was hypothesized that at least one of the position groupings would show significant tendencies

toward one of the DiSC styles. The following section further explains the results of this study and how these results build upon foundational literature.

Overall, this study adds to the literature demonstrating the vast heterogeneity of members of a football team. While previous research has used assessments where athletes can be categorized as one or another type, such as high levels of extraversion for athletes (Schurr, Nisbet & Wallace, 1984), this study explored DiSC profiles wherein athlete data can fall all over the DiSC circle, determined by many different factors. Someone high in extraversion, for example, could end up anywhere across the circle.

Addressing Research Question 1, DiSC style differences based on football positions were explored. This study shows similar parallels to previous work surrounding attackers and midfielders. As Kirkcaldy's (1982) study found attackers to be higher in extraversion and psychoticism, it's fitting the Quarterbacks show relations to the Dominance style. Typically, those within the primary Dominance style tend to be extraverted, independent, and dominant (DiSC Profile). Quarterbacks and attackers can relate as they are both looking to offensively score and lead their teams to success. These results appear very fitting the further we explore the qualities of someone in the Dominance style and a typical Quarterback. Those with the primary D style place an emphasis on accomplishing results, the bottom line, and confidence (DiSC Profile). They are often motivated by winning, competition, and success; while they prioritize challenges, taking action, and achieving immediate results (DiSC Profile). These traits and skills all align with the quarterback of a football team, as that individual is looked to as the play-maker and leader within an offense. They need to exude the confidence and motivation to lead their team, and very frequently see immediate results on the field related to their actions and decisions (Hall, 2019). If an individual displays these qualities at a young age while learning the game of

football, they might naturally be inclined to pursue a quarterback position. By continuing to play in the quarterback position, these traits could be heightened and observed during competition. It's important to note that there are typically very few quarterbacks on a collegiate roster, so there's the potential excellent quarterbacks (D or not) in high school could end up switching positions by the time they reach collegiate football. These are some of the competencies that football coaches automatically expect to see in their leaders and therefore it's logical that our results showed a strong significance for Quarterbacks be D styles. If coaches have the understanding that a large portion of their quarterbacks are primarily D's, they can alter their communication to the group in order to get their point across in the most effective way possible. To do so, they'll need to focus on being very direct, assertively explaining the results they're seeking, and demonstrating the actions necessary to be successful (DiSC profile). However, it's important to note that individual attention might be needed for those quarterbacks who don't align with the majority D styles in order to best communicate and effectively present the messaging.

It's interesting to note that this study did not confirm significant differences between defensive backs and lineman, as multiple previous studies found slight differences in relation to other assessments within these positions (Cox & Yoo, 1995; Schurr et al., 1984). There is the potential we could have seen DiSC styles approaching significance for these positions if we would have had a greater sample size available. Our findings support the notion, rather, that there is tremendous heterogeneity within positions and coaches need to understand individual communication styles and preferences in order to maximize communication and motivation mechanisms (Chelladurai, 1984).

The second research question addressed differences between offensive and defensive players. Although some studies, such as Greenwood's (1983) did find differences between offensive and defensive players, the results of this study could not statistically conclude similar findings. The lack of significant findings could be related to the sport involved, as that 1983 Greenwood study examined a baseball team, which is considerably smaller than the size of a football team, as examined in this study. Because there are so many different positions within both the offense and defense, it does make sense to not see significant differences in DiSC styles between the offensive and defensive units. Both sides of the ball, whether trying to score, or attempting to stop the opponent from scoring, would benefit from the traits within all four of the DiSC styles. It's perhaps a positive finding to show a mixture of DiSC styles throughout both offense and defense, as the variety of styles could be one component of success within a large group of people. As Lykourentzou, et. all showed in their 2016 study, the balancing of traits could lead to higher performance on a collaborative task (Lykourentzou, et. all, 2016). Furthermore, Kirkcaldy (1982) found that personality heterogeneity within a team may serve a positive function related to team success (Kirkcaldy, 1982). Therefore, an offensive or defensive unit as a whole could potentially benefit from no significant tendencies within their DiSC styles. Because we see that offensive and defensive squads are made up of a mixture of the DiSC styles, it's important for a coach to understand all of the different tendencies and preferences related to these styles. As we've seen in previous research, it is imperative for a coach to find ways to blend together various individuals into a cohesive unit, while understanding the needs and preferences of the individuals involved (Chelladurai, 1984). A coach will therefore need to tailor and adjust their communication and motivation styles when working with an entire offensive or defensive unit in order to have the best chance to meld together the differences to work toward a

common goal (Anshel, 1997). Once a coach grasps how to foster these relationships through communication skills, it is then that the trust and comfort will be heightened, increasing the potential for success (Newman, Kim, & Alvarez, 2018).

## Limitations

The ability to generalize these results is limited by many factors. Because a convenience sample was taken specifically from one university for one sports team, the sample size was not as large as would ideally be used for this research. The choice to use a convenience sample was constrained to one school in regard to a lack of a budget or access to DiSC reports from other institutions. The ability to have a large and more evenly spread out sample size for each position would have enhanced the results of this study. A greater amount of data could have potentially made a difference with the findings that were *approaching* significance, and could perhaps lead to showing true significance. If this study was expanded to a greater sample size across multiple teams, there's the potential that more significant findings could be explored.

### **Recommendations for Future Research**

Due to the explained limitations of this study, there are many potential paths for future research. This study could be replicated with a greater sample size. It could also be replicated using individuals from multiple institutions, instead of just one. Researchers could continue to explore many other sports, such as: men and women's soccer, field hockey, lacrosse, basketball, volleyball, fencing, and more. It could also be done to include the styles of coaches for each position, in order to create additional dialogue surrounding the hope of strengthening the coachathlete relationship. Furthermore, studies could be done regarding captains or official leaders' DiSC styles in college athletics across various sports and institutions. Because little research has

been done specifically related to DiSC styles for collegiate athletes, there are many gaps that can be filled in the future. The basis of this research was to help enhance and improve the coachathlete relationship through the observation of DiSC styles related to position. All of the previously mentioned future studies could still aim to achieve the same goal. It is highly suggested to use these studies to foster conversations and improve relationships between coaches and collegiate student-athletes.

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Case Study: Executive Coaching with DiSC Classic and Team Dimensions Profile

Case Study: Using DiSC Classic as a Tool to Increase Self Awareness

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